

Educator Supply and Demand Statistical Report for the State of Tennessee

Final Report for Data through 1998-99

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Introduction: Some Well-Known Forces that Shape Supply and Demand

The purpose of this introduction is to provide the reader with a brief overview of the components and factors that shape supply and demand. Given this overview, the interpretation of the numerous facts presented in the report can be placed into this general structure of supply and demand presented below.

Analyzing the supply and demand for educators requires understanding the forces that shape the inflow and outflow of educators from public primary and secondary education, and the demographic factors that sustain and alter the number of students among districts.

Supply is composed of educators who are retained as educators from one year to the next, educators returning to education after some period of absence, and new entrants without any previous teaching experience.

Retained educators can be considered in terms of those that remain in their same position from one year to the next, or change positions. Further, such educators may change districts from one year to the next. Retention is the primary source of supply of educators, accounting for more than 90% of the supply for most positions. Thus, understanding the factors that influence attrition, or the rate at which educators leave the profession, is important. The most important factor that conditions the rate of attrition is the number of years of experience. New teachers exit at very high rates for the first 10 years. Then educators remain at rates often exceeding 95% retention, until the 28th year of experience arrives. Then the rate of attrition climbs again as educators start to retire. Having a steady supply of new teachers is essential, and observing how the existing workforce ages is just as important.

New entrants, who have bachelor degrees or are post baccalaureate first time licensure recipients, enter public primary and secondary education at the greatest rates just after graduation. The rate of entry (or the yield) then drops off dramatically. This pattern of yield is true of exiting teachers as well--the greatest number returns within 1 year of absence, then the number that return drops greatly.

Enrollments of students by grades follow quite predictable patterns or movement from one grade to the next. Kindergarten students are the most difficult to predict, as we must rely on live births counts five years previous to make the estimate. Economic conditions that change in or out migration, or alter the preference for private school attendance can have a substantial influence on enrollments. Enrollments, in conjunction with course taking behavior on the part of students in middle and high school, and mandated – or recommended--student to teacher ratios drive the level of demand.


The matter of supply and demand increases in complexity when considering how it varies by grade, subject area, district, gender, and ethnicity. Indeed, some districts have many applicants while others have few. Some subject areas have a glut of trained and certified individuals; others have a shortage. Some positions are largely male, others female. Some positions are well represented by a diversity of ethnic groups; others are not.


This report provides information about many of these forces, and uses the trends in the data to present a supply and demand projection to the year 2004.

Digest of Findings

Changes in Student Enrollments


Tennessee has experienced differing rates of change in the number of enrollments by grade. Total enrollments have increased steadily over the past 10 years, but most recently have decreased. In 1997-98 total enrollments were at 978,438 students, having increased by almost 16,000 students in 1996-97. In 1998-99 total enrollments dropped to 967,556 or are decline of almost 11,000 students from the previous year. The high school grade levels, which had been increasing steadily for more than a decade, showed a one-year drop of more than 5,000 students. These changes raise questions about the accuracy of reporting. This is particularly true given live births have increased greatly suggesting that ample out-migration may be unlikely.


 Note: Through 1997-98 all grade groupings showed increases except kindergarten and special education. From 1997-98 to 1998-99 all grade levels showed declines except special education.


 Note: These changes in enrollments, often in the thousands, translate into small overall percentage changes to the State as a whole. Nonetheless, the numbers are large. Over the past five years kindergarten enrollments have declined 5 percent and special education by 8 percent. Elementary grades have grown by 5 percent, middle school grades and high school grades and total enrollments have each increased by 2 percent, and junior high school grades have increased by 1 percent.

Demographic Trends in the Educator Workforce


Change in the Number of Educators


 Note: All broad categories of educators (administrators, teachers, staff—see appendix 1 for definition of these categories) have increased in size over the past 5 years. The greatest percentage change from 1995 to 1999 has been in professional staff and teachers both of which have increased 10 percent, and the least in administration at 8 percent. The entire educator workforce has shown a 10 percent increase, or 5560 more educators in 1998-99 than in 1994-95.


 Note: The last two years, 1998 and 1999, have had the largest growth in educators over the set of years observed in the data: 3.1 percent and 3.2 percent respectively.

 Note: Looking more closely at changes in the number of educators from 1995 to 1999, the areas of greatest percentage *growth* over the last 5 years are Jr. high school teachers at 18.4 percent, other professional staff at 14.8 percent, guidance counselors at 13.9 percent, and kindergarten and elementary teachers at 12.4 percent. The areas of *decline* or *low growth* are generally among administrators. The areas with the largest increase in numbers are elementary teachers (2095) and junior high school teachers (879). High school teachers have grown modestly at 2.8 percent.

Female Educators

 Note: The area with the greatest percentage of female educators is professional staff at 83 percent; the lowest is administration at 38 percent.

 Note: There is a steady incremental increase in the percentage of female administrators over the past 10 years.

 Note: Among teaching categories early childhood education, kindergarten, elementary, and special education show the greatest percent female. High school and Jr. high school show the lowest percentage of females.

 Note: Among staff, librarians are 96 percent female.

Race/Ethnicity by Position

Note: Of concern is the increasing number of “unknowns” in these data. This number has increased steadily since 1994-95 to the present. Given the “unknown” data these race/ethnicity data must be interpreted with caution.

Black Educators

Note: Blacks represented roughly 11 percent of the total educator workforce in 1998-99.

Note: Blacks represent 16 percent of administrators, but only 1.5 percent of all superintendents are black.

Note: Among teachers, blacks have the highest representation among high school business teachers at 15.2 percent.

Note: Among staff, 14.7 percent of guidance counselors are black, while only 7.4 percent are librarians.

Note: The total number of black educators has increased 3 percent each year from 1997-98

Note: The total number of black teachers has fluctuated since 1989-90.

Note: In the most recent years reported, the number of black new hires exceeds 300, growing to 379 in 1998-99. In 1997-98 new entrants and rehires outnumbered exits by 349 persons. In the following year exits outnumber the sum of new hires and reentrants by 17.

Note: Black new entrants have increased steadily each of the past 6 years (since 1993-94), with particularly large increases in the most recent two years reported.

Years of Experience for Educators

Note: Ranking positions from high to low in terms of the average level of experience, we find administrators having the highest levels of experience, with kindergarten, special education, and early childhood education at the lowest levels.

Changing Experience Levels

Note: The experience level of the workforce has changed greatly over the last 10 years. The greatest changes have occurred in the 0-5 years of experience group, growing from 20 percent of the workforce in 1989-90 to 26 percent in 1998-99---*and actually increasing by more than 6,000 teachers*. The other group that has grown greatly is the 20-29 year experience group, growing from 21 percent in 1989-90 to 29 percent in 1998-99. In 1998-99, the 0-5 and the 20-29 year experience group accounts for more than 55 percent of the workforce

Level of Education for Educators

Note: Ranking positions from high to low, for the most current year, in terms of the percent by position with a MA degree and higher shows administrators have the highest percentages, while middle school teachers, early childhood education, kindergarten, elementary, and vocational educators have less than 50 percent with degrees at MA level or higher.

Educator Workforce Dynamics

DEFINITION: Educator dynamics examines the number of educators retained from one year to the next (the largest source of supply), newly hired educators with no experience, and re-entrants or educators who have had previous experience in teaching.

Educators Retained from One Year to the Next

Note: The percentage of educators who remain from one year to the next has remained quite stable over the past 5 years.

👉 **DEFINITION:** Remaining means: Number of current workforce that was employed in the previous year in Tennessee public education.

👉 Note: Around 90 percent of teachers, 98 percent of administrators, and 94 percent of professional staff are composed of educators who were retained from the previous year's workforce.

Movement of Educators Among Districts and Positions

👉 Note: Among teachers 2 percent change district from one year to the next, while only 1 percent of administrators do, and only 1 percent of professional staff do.

👉 Note: For those educators who remain in their district from the previous year, in 1998-99, 4 percent of teachers changed position (changes within teaching or to administration or staff), 12 percent of administrators changed position, and 6 percent of professional staff changed position.

Attrition of Educators

👉 **DEFINITION:** *Attrition* is the converse of retention. Attrition measures exits from one year to the next.

👉 **DEFINITION:** The attrition rate and the percent remaining measure two different things. The attrition rate measures the percent of educators who exit the workforce. The percent remaining measures what percent of the workforce is not new entrants or reentrants. For example, if there were 100 educators and 5 left, the attrition rate would be 5%. The 95 remaining educators may be joined in the following year by 10 new hires and 15 reentrants. Thus, the percent remaining would be $95 / (95 + 10 + 15)$ or 79%. We cannot observe attrition in 1998-99; that requires 1999-2000 data. Thus we can only report attrition *from* 1997-98 to 1998-99.

👉 Note: The attrition rate (the percent of those who leave from one year to the next) for the total workforce has remained at from 6 percent for the past two years). All areas show fluctuations in attrition over time.

Educator Attrition by Level of Experience

👉 Note: Attrition rates vary by level of experience. New educators with less than 3 years experience exit at rates in excess of 10 percent per year. Educators with over 10 years experience and less than 28 years exit at rates that rarely exceed 5 percent. Above 27 years, the rate of attrition increases greatly. (see figure 2)

👉 Note: The attrition rate share by level of experience (how each experience level group contributes to total attrition) remained relatively stable over the 8 years from 1989 to 1996. However in recent years (1997 and 1998) there has been a notable change. Exits of new teachers (with 0 to 5 years of experience) have increased as a share of total attrition, now accounting for more than 40 percent of total attrition. *In fact, the share of new teacher attrition has increased steadily from 1992.* This can be observed in figure 3. This is, in part, due to the increase in the share of new teachers to total educators.

👉 Note: This increase in the share of new teachers has been offset by the decline in the share of attrition held by educators with 30+ years of experience.


Attrition Rates of New Teachers


👉 Note: Since 1992-93 more than 13 percent or more of new teachers exit after the first year of service, with first year exit rates ranging up to 17 percent.


👉 Note: The total attrition rate of new educators in the first 4 years of service shows total rates indicating 30 to 36 percent exit.


👉 Note: Of those that leave, we observe about 2 percent return to higher education (as we followed them back into the Tennessee IHE data).


Re-entrants to the Education Workforce

 **DEFINITION:** Re-entrants are those educators who re-enter teaching after a number of years out of education. The longer the duration of exit from education, the lower the probability that an individual will return to education. This can be observed as the percent for reentry for 1-year post exit is the highest in most all cases.

 Note: Re-entry rates of exiting educators, over time, have fluctuated---in terms of first year re-entry rates---since 1989 (the range being 5.5% to 16.1%).

 Note: Total reentry from a cohort of exiting educators in a particular year is approximately 16-18 percent over all time for educators. That is, one can expect over a 10-year period that about 16 to 18 percent of educators who leave will return. Or alternately, more than 80 percent never return.


 Note: Re-entry rates for women with less than 20 years of experience (of child-bearing age) is generally higher from 1989 for the first year of re-entry than for the total population of re-entrants.


 Note: Since 1989, educators who have greater than 20 years experience have had the lowest first year rates of re-entry .


 Note: Teachers have a bit higher rate of re-entry than educators as a whole.

 Note: Administrators have relatively low first year re-entry rates


The Composition of Educator Hires


 Note: The composition of retained, re-entrant, and new entrant has remained stable over the categories of administrator, staff, and teachers from 1989-90 to 1998-99. Percentage of teachers who are new entrants, however, has increased fairly steadily over the past decade. It has increased significantly over the past two years, 1997-98 and 1998-99 to 6 percent.


 Note: Administrators have only 1 percent who are returnees, and less than 1 percent who are new entrants. Professional staff shows 2 percent new entrants and 3 percent who are returnees. These percentages are quite stable over the five-year period observed.


 Note: The data show an increasing reliance on new entrants as a source of supply in hiring. However, school systems still rely heavily on attracting reentrants back into the profession. In 1998-99 60 percent of new hires were new entrants.


District Analysis of Educators


 Note: Tennessee is composed of a few large districts and many small ones, *14 districts account for 50 percent of the total educators, and 3 districts account for more than 25 percent of total educators.* On the other end of the spectrum, districts with less than 400 students account for 28 percent of all educators.

 Note: In 1996-97 there were 34 districts with no black educators. Now, in 1998-99, there are only 21 districts with no black educators. The districts with the highest percent of black educators are Memphis with 45%, followed by Fayette at 43%.

 Note: The districts with the greatest percent of educators with MA degrees or higher are Newport City at 80% and Pickett at 79%. The lowest in 1996-97 was Bells at 19%. Now in, 1998-99, the lowest is Alamo—but at a higher rate of 25%.

 Note: The district with the highest educator to student ratio is Johnson City at 39.5, and the lowest is Johnson City at 6.0.

 Note: The district with the greatest percent of its workforce being non-teachers is Bradford and Van Buren with 25%. The lowest is Bells at 7 percent.

 Note: The district with the highest average experience for educators is Harriman with 20 years of experience. The lowest is Rogersville City with an average of 11 years of experience. .

The Higher Education Connection

The analysis of institution of higher education (IHE) focuses on the number of candidates produced and what percentages of those candidates actually enter teaching. This analysis examines differences in public versus private

IHEs, the percent entering by race/ethnicity and gender, and how particular IHEs provide entrants for particular districts.

Public IHE First Time Licensure Recipients

☞ Note: The number of bachelor degree recipients (BAs) seeking first time licensure in public institutions of higher education (IHEs) has dropped from a high in 1993 of 1350 persons, to a low in 1995 of 981 persons, to 1034 in 1997. In 1999 there were 1093 public BAs seeking first time teacher licensure.

☞ Note: The percent of white males has increased since 1993, but fallen from a high of 19% in 1995, to 14% in 1999.

☞ Note: Blacks (male and female) increased to 8% (80 persons) of recipients in 1996, then dropped to 6% (60 persons) in 1997, but has increased significantly to 10% (115 persons) in 1999.

☞ Note: The number of public post-baccalaureates (including persons in the “non-degree” category) seeking first time teacher licensure in public IHEs has dropped from a high in 1996 of 940 persons, to 766 in 1997, and in 1999 is at 761 persons. .

☞ Note: The percent white male is much higher for post-baccalaureates at around 19% to more than 20% for most years observed. However, in the most recent year, 1999, the rate dropped to 17 percent. The percent black is also higher for post-baccalaureates at 11% in 1996 (114 persons) and 10% in 1997 (73 persons). In 1999 this rate increased significantly to 16% (124 persons).

Private IHE First Time Licensure Recipients

☞ Note: For private IHEs the number of BAs seeking first time licensure increased to an historical high of 877 in 1998, decreasing slightly to 842 in 1999.

☞ Note: The percent black remains low, ranging between 1% to 5%, since 1991.

☞ Note: The number of private IHE post-baccalaureates seeking first time teacher licensure, has increased to an historical high of 325 in 1999. Each year since 1997, the numbers have broke previous historical records. The number and percent of blacks has increased to 14% in 1999 (45 persons) exceeding the previous high of 12% in 1996.

Public IHE First Time Licensure Recipients Entering Teaching

☞ **DEFINITION:** Two-year yield rates (that is the percent of candidates that actually enter teaching over a 2 year period once eligible to enter) for public BAs seeking licensure for the first time were examined to see how trained graduates were entering the Tennessee educator workforce. For example, given the available data at the time of this report, we can track those eligible in 1998 into the workforce in 1998 and 1999. This yield for those eligible from 1998 is reported as 1998. We cannot report two year yields, given the data available at the time of this report, for those eligible in 1999.

☞ Note Yields for black males have increased to 88% in 1997 but dropped to 73% in 1998. That is, of those black males with BAs and first time licensure in 1997 88 percent entered teaching in 1997 and 1998. For those eligible in 1998, 73 percent entered over 1998 and 1999. In the last two years the yield rates have increased significantly for both genders for whites and blacks, and for female Hispanics.

☞ Note: For post-baccalaureates, the yields are noticeably lower than for the BAs. Again, the yields have increased over the past two years.


Private IHE First Time Licensure Recipients Entering Teaching


☞ Note: For private BAs seeking licensure for the first time, the yield rates are substantially lower than the rates for the public IHEs for all categories. The highest yield (substantially higher than other categories) is for black females at


65% in 1997 and black males at 67% in 1997 . In the most recent year (1998), the two-year yield rates for blacks have dropped considerably.¹


 Note: For private post-baccalaureates the yields are somewhat lower as compared to private BAs


Entrance in Public Education by IHE Major


 **DEFINITION:** Since 1995, Tennessee has required an academic major in all teaching areas except special education, physical education, and some vocational areas. In all other areas, education majors who entered the work force after 1995 likely received their preparation and license prior to 1995. We are tracking first time entrants (i.e., no previous experience has been recorded).

 Note: For public IHEs, the greatest number of entrants over the past 5 years has been those with majors in elementary education, multi/interdisciplinary studies, special education, and “no major”—meaning individuals where no major was indicated in their IHE record (i.e., post-baccalaureate pursuit of first time licensure).

 Note: Special education, as a position, draws 57% of its entrants from the special education major. “No Major” as a major contributes substantially to the high school positions of business, foreign language, other, science, social studies, vocational education, guidance counselors, other professional staff, and supervisors.

 Note: As with public IHEs, the greatest number of entrants over the past 5 years has been elementary teacher education, multi/interdisciplinary studies, and special education—meaning individuals where no major was indicated in their IHE record (i.e., post-baccalaureate pursuit of first time licensure).

 Note: Special education as a position draws 38% of its entrants from the special education major.


 Note: Elementary Teacher Education majors contribute substantially to early childhood education, kindergarten teachers, elementary teachers, middle school teachers, junior high school teachers, and librarians.


Supply and Demand of Educators

The following analysis examines the factors that influence demand—enrollment and student to educator² ratios, and the factors that influence supply—entrance, attrition, the reserve pool, waivers and permits. The confluence of these factors is examined by type of position and by district.

Historical Enrollment Analysis at the State Level

A method employed in this analysis is to compare the projected 5 years of demand with the most recent 5 historical years of demand. This provides the reader a means to compare what has been experienced in the past 5 years with what is projected to occur in the following five years. It is a simple and direct way to compare historical trends with projected trends.

 Note: The historical rate of growth of total enrollments, from year to year, has been about 1.5 percent per year for the last 5 years. However, the data show a 1.1 percent drop in enrollments in 1999³.

 Note: The historical change in the total number of educators has varied, with years of increase greater than 2 percent, followed by period of growth less than 1 percent. In 1998 and 1999 teacher growth has exceeded 3 percent for each year. Likewise, in 1998 and 1999 educator growth has exceeded 3 percent for each year.

¹ Data provided for the years 1998 and 1999 from private institutions of higher education was incomplete; a number of schools' data were missing. Thus, the yield rates from 1998, for private institutions of higher education, are not based on all private institutions of higher education.

² Educators include administrators, professional staff, and teachers.

³ The drop in enrollments may be a function of under-reporting and over-reporting by certain districts. This uncertainty about reporting makes clear statements about trends difficult. The report assumes the level of numbers is correct.

☞ Note: The historical student-to-teacher ratio has been around 19 from 1991 to 1997. From 1998 to 1999 the rate has dropped, with the most recent year showing a significant decline to 18.1 percent⁴. These changes are also reflected in a recent decline in student to teacher ratios.

☞ Note: The historical student-to-educator ratio has been around 16.4 up to 1997. From 1998 to 1999 the rate has dropped, with the most recent year showing a significant decline to 15.5 percent⁵. These changes are also reflected in a recent decline in student to teacher ratios.

☞ **DEFINITION:** The number of live births in a particular year influences, in part, the number of kindergarten students five years hence. Thus live births can be a predictor of kindergarten enrollments.

☞ Note: The number of live births grew greatly from 1988 to 1989. Since that point live births have hovered between 72,000 and 74,000. However there was a substantial increase in 1998. Such recent steady growth portends increased kindergarten enrollments five years from the live birth date. This is shown in the figure below, where live births are graphed as well as kindergarten enrollments five years hence from those live births.

☞ Note: Note the measure “rate of entry” is the ratio of kindergarten enrollments to live births. This rate has exceeded the level of one since 1989 indicating that in the intervening years, in-migration, and entry into kindergarten by children of ages other than 5 years old could be contributing the kindergarten enrollments.

Projected Enrollment Analysis at the State Level

☞ Note: **KINDERGARTEN:** In the previous report we had projected⁶ that enrollments in kindergarten students would level off over the next five years, barring any great change in net-migration. The most recent years of history bear out this prediction as kindergarten enrollments declined in 1998 and 1999. We project that decline rebounding in the future as we have observed live birth rates climb dramatically in 1997 and 1998. Thus while kindergarten enrollments decline 1% over the past 5 historical years, we project a 6% increase over the next five years from 2000 to 2004.

☞ Note: **ELEMENTARY:** Elementary grades should experience a similar degree of growth from 2000 to 2004, as was experienced from 1995 to 1999 as the decreased number of kindergarten students from 1998 and 1999 enter elementary grades.

☞ Note: **MIDDLE SCHOOL:** There will be an increase in middle school students of roughly 6,000 over the projection period of 2000-2004. This is compared with an increase of 4,409 from 1995 to 1999. This increase results from the historically very high enrollments in grades 1-4 moving into grades 5-6 over this period.

☞ Note: **JUNIOR HIGH SCHOOL:** Junior high school grades (grades 7 and 8) will increase substantially from 2000 to 2004 as historically large cohorts from grades 3 through 7 make their way through the Junior high school grades. Over this period Junior high school enrollments will increase by more than 16,000 students—or an 11 percent increase. This compares to a much lower increase of about 1,700 from 1995-1999.

☞ Note: **HIGH SCHOOL:** High school grades will increase by 6 percent from 2000 to 2004, adding almost 16,000 students. *This results from historically large class sizes in grades from grades 4 to 11 moving through these grades.* Grade 4 students in 1999 will be in grade 9 in the year 2004. This compares to an increase of 9,600 from 1995-1999.

☞ Note: **SPECIAL EDUCATION:** Special education enrollments are predicted to increase by 6 percent from 2000-2004, or by 944 students. That projection is based on the assumption that special education is a percentage of total enrollments. This percentage has been quite volatile historically, and so special education enrollments are particularly difficult to predict.

Projected Enrollment Analysis at the District Level

☞ Note: The percent of districts showing growth in *total* enrollments increases from 50 percent in the historical period, to 86 percent in the projected period.

⁴ Again, note previously stated concern about possible under-reporting.

⁵ Again, note previously stated concern about possible under-reporting.

⁶ The projections are based on the cohort-survival method.

☞ Note: The percent of districts showing growth in *kindergarten* enrollments increased from 48 percent in the historical period, to 68 percent in the projected period.

☞ Note: Middle school and junior high school show substantial increases in the percent of districts with enrollment growth. For middle school the percent increases from 41 percent to 72 percent, and for junior high the percent climbs from 44 percent to 80 percent.

☞ Note: The percent of high school districts with enrollment increases from 44 percent over the 1995-99 period, to 60 percent over the 2000-2004 period.

☞ Note: The percent of special education enrollment increases from 29 percent over the 1995-99, to 74 percent over the 2000-2004 period.

Projection of the Total Educators and Teachers Needed


☞ Note: The total number of educators increases over time, in both the historical and projected periods. The projected rates of increase in educators is between less than 1 and 2 percent per year, well in line with historical rates that fluctuate between less than 1 percent to more than 3 percent.

☞ Note: Projected enrollments follow a range of growth between 1 and 2 percent. Note that the student to educator ratios and student to teacher ratios increase by one-tenth of percent from 2002 on as enrollment growth accelerates.


☞ **DEFINITION:** In all cases except kindergarten, we have departed from our previous method of conducting projections so that all districts will meet the EIA student to teacher ratios by 2004. This is due to most districts having met such standards. We currently project demand using the last year student to educator ratio held constant through the projection period. For kindergarten we set the ratio at the EIA standard of 20, which is lower than the last year historical rate of 20.4.


☞ **NOTE:** The changes over the projected period are smaller in terms of educators and teachers needed, but larger in terms of enrollments. The larger enrollments emerge from historical large kindergarten and elementary grades moving into upper grades, and historically large live births moving into kindergarten. However, fewer educators are needed as overall attrition is low and student-to-teacher ratios are meeting EIA standards.


Projection of the Number of Teacher Positions Needed

 Note: The following breaks out the projections into grade level positions. The number of teaching positions is projected to increase in all categories. However, there are differences in the rate of change by category. Comparing the changes for the number of teachers from 1994-95 to 1998-99 to the changes in number of educators from 1999-2000 to 2003-2004 we find the following.

- The increase in the number of kindergarten teachers needed from 1995 to 1999 was 404, while the total number of teachers needed from 2000 to 2004 increases from 3,941 to 4,185. Over this time period 975 teachers need to be hired increasing the total number of kindergarten teachers by 244. The total number of kindergarten teachers in 1999 was 3,725. In 2004, 4,185 total kindergarten teachers will be needed.
- The number of additional elementary teachers (grades 1-4) increased by 2,095 from 1995-1999, and will increase by a smaller number from 2000-2004 by 1,134. Over this time period 4,924 teachers need to be hired increasing the total number of elementary teachers by 1,134. The total number of elementary teachers in 1999 was 18,951. In 2004, 20,255 total elementary teachers will be needed.
- The number of additional middle school teachers (grade 5-6) *increased* by 467 from 1995-99, and will increase by a smaller number, 246 from 2000-2004. Over this time period 1,586 teachers need to be hired increasing the total number of middle school teachers by 246. The total number of middle school teachers in 1999 was 5,911. In 2004, 6,330 total middle school teachers will be needed.
- The number of additional Junior high school teachers (grade 7-8) increased by 879 additional teachers needed from 1995-99 and will require a smaller increase of 605 teachers from 2000-2004. Over this time period 1,910 teachers need to be hired increasing the total number of junior high school teachers by 605. The total number of junior high school teachers in 1999 was 5,655. In 2004, 6,305 total junior high school teachers will be needed.
- The number of additional High school (grades 9-12) teachers increased by 364 teachers from 1995-99, and will require 794 from 2000-2004. The total number of high school teachers in 1999 was 13,344. Over this time period 3,319 teachers need to be hired increasing the total number of high school teachers by 794. A total of 14,322 high school teachers will be needed in 2004.
- The number of additional special education teachers needed increased by 544 from 1995-99, and is projected to increase by 341 teachers from 2000-2004. Over this time period 1,875 teachers need to be hired increasing the total number of special education teachers by 341. The total number of special education teachers in 1999 was 5,804. A total of 6,119 special education teachers will be needed in 2004.
- The number of additional administrators needed increased by 194 from 1995-99, and will increase by a smaller number, 176, from 2000-2004. Over this time period 930 administrators need to be hired increasing the total number of administrators by 176. The total number of administrators in 1999 was 2,750. A total of 2,960 administrators will be needed in 2004.
- The number of additional staff needed increased by 541 from 1995-99, and will increase by a smaller number, 368, from 2000-2004. The total number of staff in 1999 was 5,977. Over this time period 1,926 staff need to be hired increasing the total number of staff by 368. A total of 6,414 staff will be needed in 2004.

 Note: In general, the ratios became smaller (that is better) over time from 1995-96 to 1996-97 and as measured in 1998-99. This suggests that most districts have been successful in finding supply to meet the demands set by the EIA standards.

 Note: The only area that seems to be facing a sustained difficulty in reaching the standard is the kindergarten grade. There has been substantial improvement where 79 percent of the districts equaled or bettered the standard in 1998-99, up from only 59 percent in 1996-97.

 Note: Improvements are seen in all other areas, except for certain positions in high school that show very small declines: language arts, foreign languages, and mathematics.

Reserve Pool Analysis

☞ **DEFINITION:** The reserve pool is composed of those educators who have credentials to teach, but are currently not hired in the Tennessee public education system. The issue in examining the reserve pool is ---are there many or few individuals in particular subject areas?

☞ **DEFINITION:** The current reserve pool is estimated by: taking all persons certified after 1994 with valid licenses with expiration dates post-1999, removing those persons with over 25 years experience, those who died, and those currently in the workforce.

☞ **DEFINITION:** The number of persons in the reserve pool is estimated by taking the total number of endorsements and dividing by the number of persons. The reason this is done is because individuals can have more than one endorsement (there are cases of persons with 19 endorsements). Thus, there are more endorsements than persons. In this case there are 35,020 endorsements shared among 17,445 individuals or approximately 2 endorsements per person. So taking half of the endorsements reported provides a rough estimate of the number of persons in the reserve pool.

☞ Note: Notable categories below 100 endorsements are Home Economics, ESL, Reading, Theatre, and Technology Education.

☞ Note: When endorsement counts can be matched with positions, librarians have the smallest percentage of endorsements relative to the number of educators in the workforce. Counselors, special education, math, elementary, and foreign languages follow this.

Waiver and Permit Analysis

☞ Note: The broad area of general education has the most waivers and permits in 1999-2000 holding more than 66 percent. Within that area, elementary grades, mathematics, social studies, health & physical education with drivers' education, and science top the list.

☞ Note: Special education as an area follows at 27 percent of the totals of waivers and permits for 1999-2000. Within that area, special education as a category dominates, followed by resource, speech/language, and ESL.

☞ Note: Vocational as an area provides 6 percent of the waivers and permits in 1999-2000, topped by Trade & Industrial.

☞ Note: Foreign language has the greatest percentage of waivers and permits. Social studies follows. Special education ranks after mathematics, language arts, and science. And while elementary has the greatest total number of waivers and permits after special education, its percentage at 1.3.

District Waivers and Permits

☞ **DEFINITION:** The following sections examine districts in terms of access to supply measure by demand for waivers, permits, and how enrollment growth compares to educator workforce growth.

☞ Note: Memphis accounts for 43.2 percent of the total of waivers and permits, while accounting for only 12.5 percent of the total educator workforce.

☞ Note: 2 districts, Memphis and Davidson account for more than 50 percent of the total of waivers and permits issued.

☞ Note: Out of the 139 districts, 114 requested waivers. Of those 114 districts, 53 asked for 5 or less waivers---17 asked for only a single waiver.

☞ Note: 25 districts reported no waivers or permits in 1999-2000

Comparing Change in District Enrollment with Change in Educator Workforce


☞ Note: The district with the largest growth in total enrollments from 1995 to 1999 is Etowah at 38.2%. The greatest decline in enrollments is for Clinton with a decline of 18.8 percent.

☞ Note: The district with the largest growth in total educators from 1995 to 1999 is Rutherford at 36.6%. The greatest decline in enrollments is for Clay with a decline of 18 percent.

The Influence of the Aging Workforce on Educator Supply

A current concern is the aging of the workforce. Given that a large portion of the workforce is composed of “baby boomers” and they are aging---will the educator workforce suffer large losses in the years ahead? To attempt to answer that question a simulation of the workforce aging, and its impact on attrition was conducted. Given assumptions in the simulation run (see report) it seems likely that no “dramatic” change in supply is likely to be observed over the period of concern even with increasing enrollments---unless entrants (that is re-entrants and entrants) somehow drops by 20 percent from the most recent levels and remain at that low level for 5 years in a row. *The key then to stable supply is the ability to enlist sufficient hires at recent historical levels.*

Analysis of Supply and Demand Conditions

 **Note:** Tennessee will face some challenges in keeping the supply in balance with the demand for educators in order to meet its EIA standards for student to teacher ratios. As discussed, there are numerous factors influencing supply and demand: the change in enrollments, the aging of the workforce, the size of the reserve pool, and the number of licensure candidates produced by Tennessee IHEs. These conditions are measured by the degree to which standards for student to teacher ratio are met.

Subject Areas of Concern

Special Education: particularly the areas of educable mentally retarded, visually impaired, deaf and hearing impaired. These areas have low numbers in the reserve pool and special education has a very large number of waivers and permits.

Elementary: There are potential shortages in selected geographic areas. There have been a large number of persons trained to teach elementary grades---larger than any other grade group. Educators trained as elementary teachers have the highest yields out of the IHEs (66%). There is a large number of educators in the reserve pool of trained to teach elementary grades. Yet, there are a large number of waivers and permits for elementary (outdone only by special education). However, this number is a relatively small percent of the total positions in elementary (only 1.3 percent). This argues for a very regionalized or segmented reserve pool for elementary teachers.

Foreign Languages: Waivers and permits as a percent of a position total workforce are highest for foreign language teachers, and the reserve pool estimates show low numbers for all languages except Spanish and French.


Librarians: this group shows a small reserve pool and waivers and permits for more than 5 percent of the librarian workforce.


Guidance Counselors: Low reserve pool.

ESL: Large number of waivers and permits (40 in 1998-99, and 27 in 1999-2000), low numbers in the reserve pool (83 endorsements).

Math and Science: Large number of waivers and permits.

Social Studies: Large number of waivers and permits relative to the number of positions (the second largest percent at 9.5 percent). However there is a reserve pool of 3,209 endorsements. Again this argues for a very regionalized or segmented reserve pool for social studies teachers.

 **Note:** Again, these conditions will be exacerbated when such subjects are in junior high schools (given the large projected increase in enrollments) and high school (given a somewhat larger increases in growth in enrollments from historical levels).

 **Note:** However, all of these concerns should be kept in perspective. Of the more than 62,000 educators in the system in 1998-1999, there were 693 waivers and 921 permits or about 2.6 percent of the total workforce. *That is, more than 97 percent of the positions are filled with appropriately endorsed educators.*

☞ Note: Further, EIA standards are being met in the great majority of cases among all grade levels. With regard to EIA standards, there is a statewide surplus of teachers in all areas with standards except for kindergarten. *Please note, that certain districts, however, still have not met the standards and thus are facing problems with obtaining adequate supply.*

Conclusion

BOTTOM LINE IN TERMS OF SUPPLY AND DEMAND

- The supply of teachers is quite regional within the state linked closely to the geographical location of the institute of higher education.
- Institutes of higher education have been quite successful in increasing the supply of black candidates for teaching in Tennessee public education.
- Districts attempting to meet the EIA standards are meeting them more than adequately. Continued improvement is needed in kindergarten, and there is some small recent slippage in foreign languages and math student to teacher ratios.
- Recent increases in live births indicate that kindergarten enrollments will begin to increase in the projection period and beyond.
- Growth in enrollments will occur at all grade levels with the greatest growth occurring in junior high school grades. All subject areas in those grades are vulnerable to potential supply shortages.
- Subject areas of special education, foreign languages are of concern. Math and science show large numbers of waivers.
- The areas of elementary and social studies are of concern in urban areas.
- Staff areas of librarians and counselors are of concern.

Report on Supply and Demand

Changes in Student Enrollments

Tennessee has experienced differing rates of change in the number of enrollments by grade. Total enrollments have increased steadily over the past 10 years, but most recently have decreased. In 1997-98 total enrollments were at 978,438 students, having increased by almost 16,000 students in 1996-97. In 1998-99 total enrollments dropped to 967,556 or are decline of almost 11,000 students from the previous year. The high school grade levels, which had been increasing steadily for more than a decade, showed a one-year drop of more than 5,000 students. These changes raise questions about the accuracy of reporting. This is particularly true given live births have increased greatly suggesting that ample out-migration may be unlikely.


 Note: Through 1997-98 all grade groupings showed increases except kindergarten and special education. From 1997-98 to 1998-99 all grade levels showed declines except special education.

Table 1: Net Enrollments by Grade Level

Year	K	1-4	5-6	7-8	9-12	Special Education	Total
1990-1991	68,100	284,288	134,868	134,085	240,515	18,390	880,246
1991-1992	68,392	287,105	137,410	135,665	243,741	20,959	893,272
1992-1993	69,680	287,777	140,524	138,900	249,570	20,524	906,975
1993-1994	73,547	291,880	141,531	141,903	255,736	19,076	923,673
1994-1995	76,576	296,048	141,519	144,063	258,471	19,723	936,400
1995-1996	79,597	300,753	143,235	143,756	262,367	18,509	948,217
1996-1997	80,085	308,051	145,781	143,579	266,990	18,159	962,645
1997-1998	77,747	317,938	146,506	146,963	273,613	15,671	978,438
1998-1999	75,968	314,708	145,928	145,830	268,089	17,033	967,556

Table 2: Changes in Number of Students by Grade Level from the Previous Year

Year	Change in Students by Grade Groups					Change Special Education Students	Change in Total Students
	K	1-4	5-6	7-8	9-12		
1992-93	1288	672	3114	3235	5829	-435	13703
1993-94	3867	4103	1007	3003	6166	-1448	16698
1994-95	3029	4168	-12	2160	2735	647	12727
1995-96	3021	4705	1716	-307	3896	-1214	11817
1996-97	488	7298	2546	-177	4623	-350	14428
1997-98	-2338	9887	725	3384	6623	-2488	15793
1998-99	-1779	-3230	-578	-1133	-5524	1362	-10882
Five Year Change 1995-99	-608	18,660	4,409	1,767	9,618	-2,690	31,156


 Note: These changes in enrollments, often in the thousands, translate into small overall percentage changes to the State as a whole. Nonetheless, the numbers are large. Over the past five years kindergarten enrollments have declined 5 percent and special education by 8 percent. Elementary grades have grown by 5 percent, middle school grades and high school grades and total enrollments have each increased by 2 percent, and junior high school grades have increased by 1 percent.

Table 3: Rates of Change in Enrollments by Grade Level from the Previous Year

Year	K	1-4	5-6	7-8	9-12	Special Education	Total
1992-93	2%	0%	2%	2%	2%	-2%	2%
1993-94	6%	1%	1%	2%	2%	-7%	2%
1994-95	4%	1%	0%	2%	1%	3%	1%
1995-96	4%	2%	1%	0%	2%	-6%	1%
1996-97	1%	2%	2%	0%	2%	-2%	2%
1997-98	-3%	3%	0%	2%	2%	-14%	2%
1998-99	-2%	-1%	0%	-1%	-2%	9%	-1%
Five Year change: 1995-99	-1%	6%	3%	1%	4%	-14%	3%

Demographic Trends in the Educator Workforce

Change in the Number of Educators

☞ Note: All broad categories of educators (administrators, teachers, staff) have increased in size over the past 5 years. The greatest percentage change from 1995 to 1999 has been in professional staff and teachers both of which have increased 10 percent, and the least in administration at 8 percent. The entire educator workforce has shown a 10 percent increase, or 5560 more educators in 1998-99 than in 1994-95.

☞ Note: The last two years, 1998 and 1999 have had the largest growth in educators over the set of years observed in the data: 3.1 percent and 3.2 percent respectively.

Table 4: Growth in Tennessee Educator Workforce 1989-90 to 1998-99

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Number Change 1995-1999	Percent Change 1995-1999
All Educators	52,581	53,783	53,902	54,903	56,424	56,750	58,130	58,523	60,364	62,310	5,560	10%
Change from Previous Year	65	1202	119	1001	1521	326	1380	393	1841	1946		
Percent Change	0.1%	2.3%	0.2%	1.9%	2.8%	0.6%	2.4%	0.7%	3.1%	3.2%		
Administrators	2,503	2,512	2,468	2,487	2,530	2,556	2,578	2,638	2,695	2,750	194	8%
Change from Previous Year	20	9	-44	19	43	26	22	60	57	55		
Percent Change	0.8%	0.4%	-1.8%	0.8%	1.7%	1.0%	0.9%	2.3%	2.2%	2.0%		
Professional Staff	4,500	4,893	4,897	5,199	5,346	5,436	5,598	5,637	5,746	5,977	541	10%
Change from Previous Year	1087	393	4	302	147	90	162	39	109	231		
Percent Change	31.8%	8.7%	0.1%	6.2%	2.8%	1.7%	3.0%	0.7%	1.9%	4.0%		
Teachers	45,578	46,378	46,537	47,217	48,548	48,758	49,954	50,248	51,923	53,583	4,825	10%
Change from Previous Year	-1042	800	159	680	1331	210	1196	294	1675	1660		
Percent Change	-2.2%	1.8%	0.3%	1.5%	2.8%	0.4%	2.5%	0.6%	3.3%	3.2%		

Note: Looking more closely at changes in the number of educators from 1995 to 1999, the areas of greatest percentage *growth* over the last 5 years are Jr. high school teachers at 18.4 percent, other professional staff at 14.8 percent, guidance counselors at 13.9 percent, and kindergarten and elementary teachers at 12.4 percent. The areas of *decline* or *low growth* are generally among administrators. The areas with the largest increase in numbers are elementary teachers (2095) and junior high school teachers (879). High school teachers have grown modestly at 2.8 percent.

Table 5: Profile and Changes in Educational Positions in Tennessee

POSITION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	1990-1999	1995-1999
Administrators												
Elem. Principals	1,113	1,137	1,139	1,118	1,130	1,104	1,122	1,113	1,117	1,132	19	28
	0.6%	2.2%	0.2%	-1.8%	1.1%	-2.3%	1.6%	-0.8%	0.4%	1.3%	1.7%	2.5%
Secondary Principals	327	321	323	310	306	309	303	297	306	308	-19	-1
	-15.3%	-1.8%	0.6%	-4.0%	-1.3%	1.0%	-1.9%	-2.0%	3.0%	0.7%	-5.8%	-0.3%
Supervisors	552	585	590	584	582	575	573	582	575	575	23	-
	-0.4%	6.0%	0.9%	-1.0%	-0.3%	-1.2%	-0.3%	1.6%	-1.2%	0.0%	4.2%	0.0%
Professional Staff												
Guidance Counselors	864	1,091	1,174	1,342	1,412	1,472	1,540	1,575	1,614	1,676	812	204
	NA	26.3%	7.6%	14.3%	5.2%	4.2%	4.6%	2.3%	2.5%	3.8%	94.0%	13.9%
Librarians	1,367	1,367	1,337	1,382	1,388	1,387	1,419	1,397	1,420	1,428	61	41
	3.9%	0.0%	-2.2%	3.4%	0.4%	-0.1%	2.3%	-1.6%	1.6%	0.6%	4.5%	3.0%
Other Professional Staff	1,717	1,850	1,796	1,891	1,964	2,002	2,066	2,083	2,137	2,298	581	296
	11.3%	7.7%	-2.9%	5.3%	3.9%	1.9%	3.2%	0.8%	2.6%	7.5%	33.8%	14.8%
Teachers												
Kindergarten	2,930	3,026	3,036	3,129	3,265	3,321	3,505	3,596	3,666	3,725	795	404
	-3.9%	3.3%	0.3%	3.1%	4.3%	1.7%	5.5%	2.6%	1.9%	1.6%	27.1%	12.2%
Elementary	15,651	16,214	16,317	16,611	16,918	16,856	17,182	17,473	18,263	18,951	3,300	2,095
	-2.7%	3.6%	0.6%	1.8%	1.8%	-0.4%	1.9%	1.7%	4.5%	3.8%	21.1%	12.4%
Middle School	4,942	4,974	5,013	5,191	5,364	5,444	5,607	5,572	5,749	5,911	969	467
	-6.0%	0.6%	0.8%	3.6%	3.3%	1.5%	3.0%	-0.6%	3.2%	2.8%	19.6%	8.6%
Jr. High School	4,388	4,416	4,519	4,542	4,715	4,776	5,385	5,368	5,431	5,655	1,267	879
	-2.1%	0.6%	2.3%	0.5%	3.8%	1.3%	12.8%	-0.3%	1.2%	4.1%	28.9%	18.4%
High School	12,706	12,812	12,619	12,635	12,934	12,980	12,709	12,632	13,054	13,344	638	364
	0.6%	0.8%	-1.5%	0.1%	2.4%	0.4%	-2.1%	-0.6%	3.3%	2.2%	5.0%	2.8%
Special Education	4,946	4,908	4,978	5,017	5,235	5,260	5,421	5,460	5,587	5,804	858	544
	-3.2%	-0.8%	1.4%	0.8%	4.3%	0.5%	3.1%	0.7%	2.3%	3.9%	17.3%	10.3%

Female Educators

Note: The area with the greatest percentage of female educators is professional staff at 83 percent; the lowest is administration at 38 percent.

Note: There is a steady incremental increase in the percentage of female administrators over the past 10 years.

Note: Among teaching categories early childhood education, kindergarten, elementary, and special education show the greatest percent female. High school and Jr. high school show the lowest percentage of females.

Note: Among staff, librarians are 96 percent female.

Table 6: Percentage Female by Educational Assignment in Tennessee

POSITION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Administrators	26%	27%	28%	30%	31%	33%	34%	36%	37%	38%
Professional Staff	79%	79%	80%	81%	81%	82%	82%	82%	82%	83%
Teachers	78%	78%	79%	79%	79%	79%	79%	79%	78%	78%
All Educators	75%	76%	76%	77%	77%	77%	77%	77%	77%	77%
Administrators										
Superintendents	11%	11%	9%	9%	10%	13%	13%	12%	12%	15%
Asst. Superintendents	8%	12%	26%	25%	30%	36%	38%	45%	36%	41%
Elem. & Sec. Principals	10%	6%	6%	10%	11%	9%	11%	13%	15%	14%
Elem. Principals	31%	32%	34%	36%	38%	40%	41%	43%	45%	46%
Secondary Principals	10%	11%	12%	14%	15%	14%	16%	15%	15%	15%
Asst. Elem. & Sec. Principals	21%	26%	22%	24%	30%	30%	37%	40%	48%	41%
Asst. Elem. Principals	41%	45%	49%	47%	48%	52%	54%	56%	55%	54%
Asst. Sec. Principals	18%	21%	19%	20%	22%	25%	25%	28%	29%	32%
Other Administrative	24%	24%	23%	27%	28%	26%	21%	16%	22%	22%
Professional Staff										
Guidance Counselors	79%	79%	81%	82%	82%	84%	83%	84%	84%	84%
Librarians	97%	97%	97%	97%	97%	97%	96%	96%	96%	96%
Supervisors	57%	57%	58%	59%	59%	59%	59%	58%	60%	61%
Other Professional Staff	71%	73%	74%	75%	75%	76%	77%	77%	78%	79%
Teachers										
Early Childhood Education	93%	96%	98%	98%	98%	98%	99%	100%	100%	98%
Kindergarten Teachers	99%	99%	99%	99%	99%	99%	99%	98%	98%	98%
Elementary Teachers	91%	91%	92%	91%	91%	91%	91%	90%	90%	89%
Middle School Teachers	83%	83%	83%	84%	84%	83%	83%	83%	83%	83%
Jr. High School Teachers	65%	66%	66%	66%	67%	68%	68%	68%	68%	68%
HS Business	80%	80%	80%	80%	79%	81%	78%	77%	79%	76%
HS Foreign Language	84%	83%	83%	84%	83%	82%	82%	81%	83%	82%
HS Language Arts	84%	84%	84%	83%	84%	84%	84%	83%	78%	78%
HS Mathematics	58%	60%	60%	59%	60%	61%	61%	60%	60%	60%
HS Other	47%	46%	47%	46%	46%	46%	44%	45%	54%	54%
HS Science	42%	43%	43%	45%	45%	46%	48%	48%	50%	49%
HS Social Studies	31%	31%	31%	33%	33%	32%	31%	32%	33%	32%
HS Vocational Ed.	49%	49%	50%	50%	50%	49%	49%	50%	51%	51%
Special Education	90%	90%	89%	90%	89%	89%	89%	88%	88%	87%

Race/Ethnicity by Position

Note: Of concern is the increasing number of “unknowns” in these data. This number has increased steadily since 1994-95 to the present. Given the “unknown” data these race/ethnicity data must be interpreted with caution.

Count by Race/Ethnicity	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
White	44,004	45,075	45,136	46,150	47,556	47,906	48,918	49,042	50,077	51,311
Black	6,301	6,419	6,425	6,427	6,508	6,521	6,636	6,575	6,774	6,998
Hispanic	43	45	49	55	62	63	83	92	103	103
Asian/Pacific Islander	33	32	30	32	29	38	42	45	54	62
American Indian/Native Alaskan	46	51	50	52	48	45	46	46	50	54
Unknown	2,154	2,161	2,212	2,187	2,221	2,177	2,405	2,723	3,306	3,782
Total	52,581	53,783	53,902	54,903	56,424	56,750	58,130	58,523	60,364	62,310

Change by Race/Ethnicity	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
White	351	1071	61	1014	1406	350	1012	124	1035	1234
Black	7	118	6	2	81	13	115	-61	199	224
Hispanic	0	2	4	6	7	1	20	9	11	0
Asian/Pacific Islander	-4	-1	-2	2	-3	9	4	3	9	8
American Indian/Native Alaskan	1	5	-1	2	-4	-3	1	0	4	4
Unknown	-290	7	51	-25	34	-44	228	318	583	476
Total	65	1202	119	1001	1521	326	1380	393	1841	1946

Rate of Change by Race/Ethnicity	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
White	0.8%	2.4%	0.1%	2.2%	3.0%	0.7%	2.1%	0.3%	2.1%	2.5%
Black	0.1%	1.9%	0.1%	0.0%	1.3%	0.2%	1.8%	-0.9%	3.0%	3.3%
Hispanic	0.0%	4.7%	8.9%	12.2%	12.7%	1.6%	31.7%	10.8%	12.0%	0.0%
Asian/Pacific Islander	-10.8%	-3.0%	-6.3%	6.7%	-9.4%	31.0%	10.5%	7.1%	20.0%	14.8%
American Indian/Native Alaskan	2.2%	10.9%	-2.0%	4.0%	-7.7%	-6.3%	2.2%	0.0%	8.7%	8.0%
Unknown	-11.9%	0.3%	2.4%	-1.1%	1.6%	-2.0%	10.5%	13.2%	21.4%	14.4%
Total	0.1%	2.3%	0.2%	1.9%	2.8%	0.6%	2.4%	0.7%	3.1%	3.2%

Race/Ethnicity Share by Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
White	83.7%	83.8%	83.7%	84.1%	84.3%	84.4%	84.2%	83.8%	83.0%	82.3%
Black	12.0%	11.9%	11.9%	11.7%	11.5%	11.5%	11.4%	11.2%	11.2%	11.2%
Hispanic	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%
Asian/Pacific Islander	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
American Indian/Native Alaskan	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Unknown	4.1%	4.0%	4.1%	4.0%	3.9%	3.8%	4.1%	4.7%	5.5%	6.1%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Black Educators

Note: Blacks represented roughly 11 percent of the total educator workforce in 1998-99.

Note: Blacks represent 16 percent of administrators, but only 1.5 percent of all superintendents are black.

Note: Among teachers, blacks have the highest representation among high school business teachers at 15.2 percent.

Note: Among staff, 14.7 percent are guidance counselors, while only 7.4 percent are librarians.

Table 7: Percentage of Black Educators by Educational Assignment in Tennessee 1989-90 to 1998-99

POSITION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Asst. Sec. Principals	22.6%	22.4%	22.1%	23.2%	23.5%	23.4%	24.3%	24.1%	23.8%	22.1%
Asst. Elem. & Sec. Principals	14.3%	20.6%	10.8%	11.8%	8.1%	7.5%	12.2%	15.0%	16.7%	18.9%
Asst. Elem. Principals	22.0%	24.3%	27.7%	24.8%	23.0%	21.6%	21.3%	18.9%	18.2%	17.5%
Other Administrative	16.2%	16.2%	16.7%	18.2%	18.8%	16.1%	10.7%	12.0%	17.4%	17.4%
Elem. & Sec. Principals	5.1%	6.5%	6.3%	5.8%	7.4%	9.3%	12.7%	9.1%	15.4%	15.7%
Secondary Principals	15.0%	15.0%	15.5%	16.5%	15.7%	15.2%	15.2%	14.8%	16.7%	15.3%
HS Business	14.2%	13.8%	14.2%	13.2%	13.2%	12.8%	13.6%	12.9%	14.8%	15.2%
Elem. Principals	10.7%	11.3%	11.9%	12.1%	13.3%	13.9%	14.1%	14.2%	14.5%	14.8%
Guidance Counselors	19.4%	16.6%	18.4%	17.7%	17.4%	16.8%	16.1%	14.3%	14.4%	14.7%
HS Other	14.4%	14.3%	13.7%	14.6%	15.1%	15.2%	14.2%	14.2%	12.4%	12.6%
Middle School Teachers	14.3%	13.7%	13.6%	13.3%	12.9%	12.6%	12.5%	12.3%	12.6%	12.6%
Jr. High School Teachers	10.2%	10.3%	10.7%	10.5%	10.5%	10.7%	12.0%	11.7%	11.5%	11.8%
Elementary Teachers	12.8%	12.9%	12.8%	12.4%	12.1%	11.9%	11.9%	11.8%	11.8%	11.7%
Special Education	11.8%	11.9%	11.6%	11.4%	11.2%	11.2%	11.0%	10.8%	10.8%	11.2%
Asst. Superintendents	16.2%	16.0%	15.8%	20.8%	21.7%	20.0%	23.1%	19.4%	18.2%	10.3%
Other Professional Staff	11.8%	11.1%	10.1%	10.0%	9.5%	9.9%	9.9%	9.3%	9.9%	9.8%
Kindergarten Teachers	10.8%	10.4%	10.0%	9.4%	9.2%	9.2%	9.3%	9.3%	9.2%	9.0%
HS Mathematics	9.9%	9.6%	9.6%	8.5%	8.5%	8.3%	7.9%	8.0%	8.2%	8.6%
HS Vocational Ed.	10.1%	9.7%	9.5%	10.0%	10.0%	10.3%	9.7%	9.2%	8.5%	8.4%
HS Science	8.6%	9.2%	9.4%	9.5%	9.2%	9.1%	9.4%	9.8%	8.7%	8.1%
HS Language Arts	9.2%	10.2%	10.5%	9.8%	9.5%	9.2%	8.9%	8.5%	8.0%	7.9%
Librarians	9.5%	9.5%	9.8%	9.3%	9.0%	8.8%	8.7%	8.0%	7.7%	7.4%
Supervisors	7.6%	8.0%	9.0%	9.6%	9.5%	9.9%	9.4%	8.6%	8.3%	7.3%
HS Social Studies	7.2%	6.8%	6.8%	6.7%	7.1%	6.7%	6.2%	6.4%	5.9%	6.0%
HS Foreign Language	5.9%	5.4%	5.5%	5.6%	5.5%	5.6%	5.4%	6.1%	5.6%	5.6%
Early Childhood Education	NA	7.1%	5.5%	5.4%	6.0%	5.8%	5.5%	5.4%	5.2%	5.2%
Superintendents	1.4%	1.4%	0.7%	0.7%	1.5%	1.5%	1.5%	0.8%	0.8%	1.5%

Note: The total number of black educators has increased 3 percent each year from 1997-98. Exits outnumber hires by 224 from 1997-98 to 1998-99 (in bold in table). The number of new entrants has been increasing since 1993-94, with substantial increases in recent years. Re-entrants reached a high in 1994-95 of 253 persons; this dropped to 187 in 1996-97 and has increased modestly since then (in bold in table). Again--recall data issues with regard to the number of "unknowns" reported for race/ethnicity when interpreting these data.

Table 8: Black Educators Entering and Leaving Educator 1990 to 1999

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
All Educators	52,581	53,783	53,902	54,903	56,424	56,750	58,130	58,523	60,364	62,310
Percent of All Educators	12%	12%	12%	12%	12%	11%	11%	11%	11%	11%
Grand Total	6,301	6,419	6,425	6,427	6,508	6,521	6,636	6,575	6,774	6,998
Change from Previous Year		2%	0%	0%	1%	0%	2%	-1%	3%	3%
Retained from Previous Year	6,068	6,169	6,170	6,001	6,112	6,006	6,127	6,085	6,244	6,411
New entrants	110	119	114	249	222	262	287	303	341	395
Reentrants	123	131	141	177	174	253	222	187	189	192
New entrants and returnees minus those who left in the previous year (net gain or loss)		118	6	2	81	13	115	-61	199	224

Note: change from previous report results from using more recent years of data to fill in formerly missing race/ethnicity data.

Note: The total number of black teachers has fluctuated since 1989-90.

Note: In the most recent years reported, the number of new hires exceeds 300, growing to 379 in 1998-99 (in bold in table). In 1997-98 new entrants and rehires outnumbered exits by 349 persons (in bold in table). In the following year exits outnumber the sum of new hires and reentrants by 17 (in bold in table).

Note: New entrants have increased steadily each of the past 6 years (since 1993-94—italics in table), with particularly large increases in the most recent two years reported (see in bold below)

Table 9: Black Teachers Entering and Leaving Educator 1990 to 1999

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
All Teachers	45,578	46,378	46,537	47,217	48,548	48,758	49,954	50,248	51,923	53,583
Percent of All Teachers	12%	12%	12%	12%	11%	11%	11%	11%	11%	11%
Grand Total	5,631	5,571	5,505	5,492	5,548	5,533	5,637	5,615	5,964	5,947
Change from Previous Year	2.0%	-1.1%	-1.2%	-0.2%	1.0%	-0.3%	1.9%	-0.4%	6.2%	-0.3%
Retained from Previous Year	5,406	5,329	5,265	5,086	5,172	5,051	5,146	5,140	5,450	5,389
New entrants	106	117	113	<i>241</i>	<i>212</i>	<i>248</i>	<i>279</i>	<i>298</i>	333	379
Reentrants	119	125	127	165	164	234	212	177	181	179
New entrants and returnees minus those who left in the previous year (net gain or loss)	83	-60	-66	-13	56	-15	104	-22	349	-17

Note: change from previous report is results from using more recent years of data to fill in formerly missing race/ethnicity data.

Years of Experience for Educators


 Note: Ranking positions from high to low in terms of the average level of experience, we find administrators having the highest levels of experience, with kindergarten, special education, and early childhood education at the lowest levels.

Table 10: Positions Ranked by Average Experience, from High to Low, for 1998-99

POSITION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Asst. Superintendents	26	27	28	29	30	29	29	29	30	30
Superintendents	24	25	25	26	26	26	27	26	27	28
Other Administrative	21	22	23	25	27	26	27	27	28	27
Secondary Principals	25	25	26	26	26	26	26	26	26	26
Supervisors	23	23	24	24	24	24	25	25	25	25
Elem. Principals	23	23	24	24	24	24	24	25	25	25
Elem. & Sec. Principals	24	25	25	24	24	25	25	24	24	24
Asst. Sec. Principals	22	22	23	23	23	23	23	23	23	24
Asst. Elem. Principals	21	21	22	21	21	21	21	21	21	21
Librarians	18	18	19	19	19	19	19	19	20	20
Guidance Counselors	19	19	20	19	19	19	19	19	19	19
Asst. Elem. & Sec. Principals	22	21	20	21	20	20	20	17	17	18
Other Professional Staff	16	16	16	16	16	16	16	17	17	17
HS Language Arts	16	16	17	16	16	16	16	16	16	16
HS Business	17	17	18	18	18	18	17	16	16	16
HS Social Studies	16	16	17	16	16	15	15	15	15	15
HS Vocational Ed.	14	15	15	15	15	15	15	15	15	15
HS Mathematics	15	15	16	15	15	14	14	14	14	15
HS Other	15	15	14	15	15	15	15	14	15	14
HS Science	15	15	16	15	14	14	14	14	14	14
Jr. High School Teachers	14	14	14	14	14	14	14	14	14	14
Middle School Teachers	14	15	15	14	14	14	14	14	14	14
HS Foreign Language	12	13	14	13	13	13	13	14	14	14
Elementary Teachers	14	14	14	14	14	14	14	14	14	14
Kindergarten Teachers	12	12	12	12	13	13	13	13	13	13
Special Education	10	10	11	11	11	12	12	12	12	12
Early Childhood Education	11	7	6	6	6	7	7	7	8	7

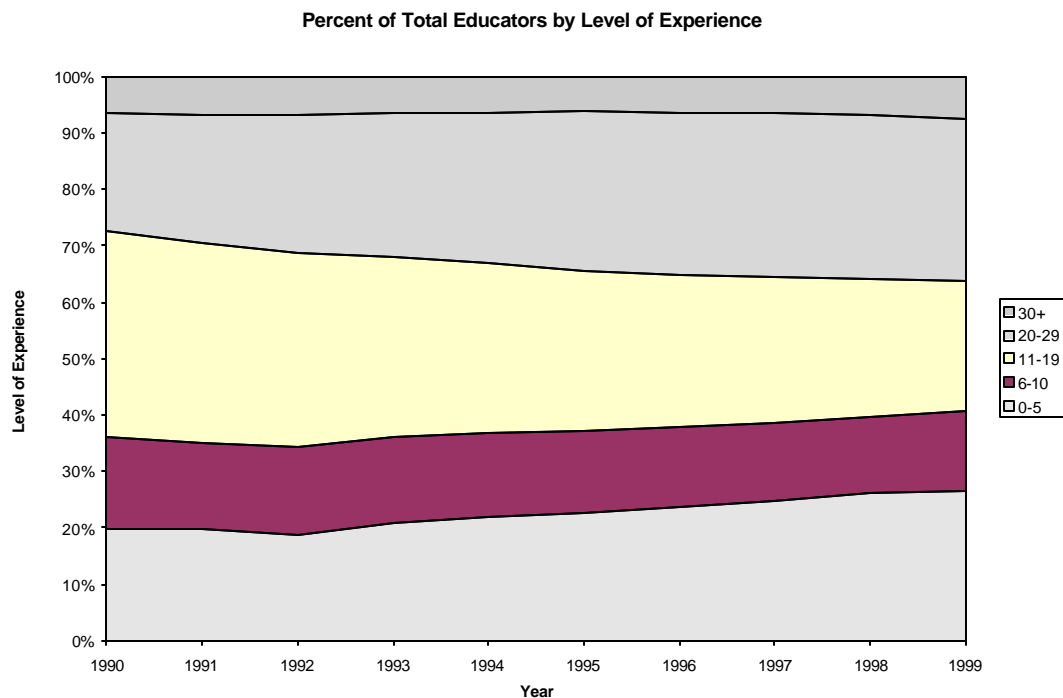
Changing Experience Levels

Note: The experience level of the workforce has changed greatly over the last 10 years. The greatest changes have occurred in the 0-5 years of experience group, growing from 20 percent of the workforce in 1989-90 to 26 percent in 1998-99---*and actually increasing by more than 6,000 teachers*. The other group that has grown greatly is the 20-29 year experience group, growing from 21 percent in 1989-90 to 29 percent in 1998-99. In 1998-99, the 0-5 and the 20-29 year experience group accounts for more than 55 percent of the workforce. This “squeezing” of the middle year experienced teachers is show in figure 1 below.

Table 11: Experience Shares by Year, All Educators

Years of Experience	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
0-5	10,430	10,591	10,137	11,430	12,324	12,918	13,781	14,419	15,781	16,484
6-10	8,494	8,328	8,341	8,335	8,503	8,231	8,194	8,155	8,094	8,871
11-19	19,229	19,046	18,543	17,635	16,887	16,093	15,647	15,150	14,850	14,357
20-29	11,019	12,149	13,205	14,040	15,133	15,978	16,765	17,074	17,509	17,973
30+	3,409	3,669	3,676	3,463	3,577	3,530	3,743	3,725	4,130	4,625
TOTAL	52,581	53,783	53,902	54,903	56,424	56,750	58,130	58,523	60,364	62,310
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
0-5	20%	20%	19%	21%	22%	23%	24%	25%	26%	26%
6-10	16%	15%	15%	15%	15%	15%	14%	14%	13%	14%
11-19	37%	35%	34%	32%	30%	28%	27%	26%	25%	23%
20-29	21%	23%	24%	26%	27%	28%	29%	29%	29%	29%
30+	6%	7%	7%	6%	6%	6%	6%	6%	7%	7%

Figure 1: Experience Shares by Year, All Educators




Level of Education for Educators

Note: Ranking positions from high to low, for the most current year, in terms of the percent by position with a MA degree and higher shows administrators have the highest percentages, while middle school teachers, early childhood education, kindergarten, elementary, and vocational educators have less than 50 percent with degrees at MA level or higher.

Table 12: Positions Ranked by Degree Level- Percent of Workforce with MA degree and higher, Sorted from High to Low, for 1998-99

Position	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Asst. Superintendents Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Superintendents Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.2%
Elem. Principals Total	96.5%	97.0%	97.7%	98.1%	98.2%	98.5%	98.5%	99.0%	99.0%	99.1%
Secondary Principals Total	99.4%	100%	100%	100%	100%	100%	100%	100%	100%	99.0%
Elem. & Sec. Principals Total	98.3%	98.4%	98.4%	98.1%	98.1%	98.1%	98.2%	98.2%	98.1%	98.0%
Guidance Counselors Total	96.9%	96.6%	97.0%	96.1%	94.6%	95.7%	96.2%	96.3%	97.5%	98.0%
Asst. Sec. Principals Total	96.1%	95.6%	97.0%	96.1%	96.3%	96.7%	96.2%	96.2%	97.5%	97.3%
Other Administrative Total	97.3%	97%	100%	100%	100%	100%	100%	96%	100%	96%
Asst. Elem. Principals Total	95.2%	95.6%	95.4%	97.0%	97.7%	97.8%	97.0%	97.7%	97.0%	95.6%
Supervisors Total	93.7%	94.0%	93.6%	94.5%	94.5%	94.8%	94.6%	94.8%	95.1%	94.3%
Asst. Elem. & Sec. Principals Total	85.7%	91.2%	94.6%	94.1%	89.2%	90.0%	87.8%	87.5%	92.9%	86.5%
Other Professional Staff Total	80.0%	77.3%	76.3%	75.6%	76.5%	76.3%	77.3%	78.8%	80.4%	81.1%
Librarians Total	67.4%	68.4%	69.9%	70.2%	70.7%	71.7%	71.7%	72.1%	72.9%	73.1%
HS Science Total	61.0%	61.3%	63.5%	61.9%	60.1%	59.1%	58.8%	58.1%	57.6%	58.6%
HS Language Arts Total	55.5%	56.9%	59.3%	58.3%	57.1%	56.8%	56.4%	57.0%	56.5%	58.0%
HS Mathematics Total	56.2%	56.7%	59.9%	57.2%	57.4%	57.3%	58.2%	58.0%	56.4%	56.5%
HS Social Studies Total	58.4%	58.2%	60.2%	56.7%	55.9%	52.7%	53.6%	55.8%	55.6%	55.7%
HS Foreign Language Total	53.3%	55.8%	57.8%	55.2%	54.5%	54.5%	54.0%	55.9%	55.4%	54.8%
Special Education Total	49.2%	50.9%	52.5%	52.0%	52.3%	52.5%	53.8%	55.2%	53.7%	54.2%
HS Other Total	53.1%	52.9%	51.2%	53.9%	53.0%	53.7%	51.9%	50.4%	52.9%	52.4%
HS Business Total	50.2%	49.8%	52.8%	50.9%	49.7%	50.1%	51.9%	53.1%	51.1%	51.3%
Jr. High School Teachers Total	48.2%	49.5%	50.2%	49.4%	49.3%	49.6%	50.4%	51.1%	50.8%	49.9%
Middle School Teachers Total	46.0%	46.5%	47.1%	45.7%	45.9%	46.3%	47.4%	48.4%	47.6%	47.5%
Elementary Teachers Total	41.1%	42.0%	43.0%	42.6%	42.5%	43.3%	43.5%	44.4%	44.9%	45.1%
Kindergarten Teachers Total	40.2%	40.1%	40.7%	40.6%	41.3%	41.9%	43.2%	44.0%	43.7%	44.7%
HS Vocational Ed. Total	40.2%	41.0%	42.0%	42.1%	42.4%	41.8%	41.2%	41.5%	43.1%	42.4%
Early Childhood Education Total	13.3%	39.3%	38.2%	35.9%	33.3%	36.4%	40.7%	44.2%	43.4%	39.4%

Educator Workforce Dynamics

 **DEFINITION:** Educator dynamics examines the number of educators retained from one year to the next (the largest source of supply), newly hired educators with no experience, and re-entrants or educators who have had previous experience in teaching.


 **Note:** The characteristics of educators (administrators, staff, teachers) are shown in the table below. Differences among these categories of educators are significant. Notably, the percentage of blacks as administrators is much higher than their representation in staff and teachers.

Table 13: Characteristics of Educators Who Stayed, Left, or Entered the Education Workforce in 1998-99

	~ Left Previous Year	Retained	Re-Entrant	New
Administrators				
Number	139	2708	40	+
Percent	5%	98.5%	1.5%	+
Age	50	50	50	+
Experience	24.5	24.3	16.5	+
Average Salary	\$ 55,385	\$56,504	\$49,322	+
Change in Average Salary*	-4%	7%	-4%	+
Percent Black	19%	16%	13%	+
Staff				
Number	328	5605	207	165
Percent	6%	93.8%	3.5%	2.8%
Age	52	49	43	31
Experience	21.9	19.7	11.0	0
Average Salary	\$ 39,374	\$43,495	\$35,086	\$27,994
Change in Average Salary	1%	7%	10%	6%
Percent Black	9%	11%	4%	9%
Teachers				
Number	3371	48213	2151	3219
Percent	7%	90.0%	4.0%	6.0%
Age	46	45	37	29
Experience	14.1	14.9	7.2	0
Average Salary	\$32,782	\$36,601	\$31,713	\$26,099
Change in average Salary	1%	6%	7%	4%
Percent Black	9%	11%	8%	12%

+ Information suppressed due to small numbers

* Change in salary for the same group in the previous year

~The percent for attrition is based on the previous year totals

Educators Retained from One Year to the Next

Note: The percentage of educators who remain from one year to the next has remained quite stable over the past 5 years.

DEFINITION: Remaining means: Number of current workforce that was employed in the previous year in Tennessee public education.

Note: Around 90 percent of teachers, 98 percent of administrators, and 94 percent of professional staff are composed of educators who were retained from the previous year's workforce.

Table 14: Tennessee Educators Remaining in the Workforce from the Previous Year 1990-1999

		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Administrators	Number Remaining	2490	2496	2433	2468	2515	2504	2553	2608	2664	2708
	Percent Remaining	99%	99%	99%	99%	99%	98%	99%	99%	99%	98%
Professional Staff	Number Remaining	4336	4700	4741	4884	5093	5092	5330	5366	5429	5605
	Percent Remaining	96%	96%	97%	94%	95%	94%	95%	95%	94%	94%
Teachers	Number Remaining	42733	43328	43729	42410	44365	44298	45519	45631	46759	48213
	Percent Remaining	94%	93%	94%	90%	91%	91%	91%	91%	90%	90%

Movement of Educators Among Districts and Positions


Note: Among teachers 2 percent change district from one year to the next, while only 1 percent of administrators do, and only 1 percent of professional staff do.


Note: For those educators who remain in their district from the previous year, in 1998-99, 4 percent of teachers changed position (changes within teaching or to administration or staff), 12 percent of administrators changed position, and 6 percent of professional staff changed position.


Table 15: Percentage of Retained Educators in Tennessee Who Changed District or Position

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Administrators										
Retained from last year Different District/Different Position	1%	1%	1%	1%	1%	1%	1%	1%	2%	1%
Retained from last year Different District/Same Position	0%	1%	0%	0%	0%	0%	0%	0%	2%	0%
Retained from last year Same District/Different Position	28%	11%	9%	17%	11%	14%	12%	15%	12%	11%
Retained from last year Same District/Same Position	71%	87%	90%	82%	88%	85%	88%	84%	84%	88%
Professional Staff										
Retained from last year Different District/Different Position	1%	1%	0%	1%	0%	1%	0%	0%	1%	0%
Retained from last year Different District/Same Position	0%	1%	0%	1%	1%	1%	1%	1%	3%	1%
Retained from last year Same District/Different Position	31%	11%	7%	13%	7%	6%	7%	7%	7%	6%
Retained from last year Same District/Same Position	68%	86%	92%	85%	92%	92%	92%	92%	90%	93%
Teachers										
Retained from last year Different District/Different Position	1%	1%	0%	1%	1%	1%	1%	1%	1%	1%
Retained from last year Different District/Same Position	1%	1%	1%	1%	1%	1%	1%	1%	3%	1%
Retained from last year Same District/Different Position	10%	6%	5%	8%	6%	6%	6%	6%	12%	3%
Retained from last year Same District/Same Position	89%	92%	94%	90%	93%	93%	92%	93%	85%	96%

Attrition of Educators

 **DEFINITION:** *Attrition* is the converse of retention. Attrition measures exits from one year to the next.

 **DEFINITION:** The attrition rate and the percent remaining measure two different things. The attrition rate measures the percent of educators who exit the workforce. The percent remaining measures what percent of the workforce is not new entrants or reentrants. For example, if there were 100 educators and 5 left, the attrition rate would be 5%. The 95 remaining educators may be joined in the following year by 10 new hires and 15 reentrants. Thus, the percent remaining would be 95/ (95+10+15) or 79%. We cannot observe attrition in 1998-99; that requires 1999-2000 data. Thus we can only report attrition *from* 1997-98 to 1998-99.

 Note: The attrition rate (the percent of those who leave from one year to the next) for the total workforce has remained at from 6 percent for the past two years). All areas show fluctuations in attrition over time.


 Note: The fluctuations observed may be the result of artifacts in reporting the data. This concern would hold for tables 16-23.

Table 16: Attrition Rates for Tennessee Educators 1988-89 to 1997-98

All Educators	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Exit Next Year	2957	2057	2880	4140	2930	4530	3348	4525	3671	3838
Retained to Next Year	49559	50524	50903	49762	51973	51894	53402	53605	54852	56526
<i>Attrition Rate</i>	6%	4%	5%	8%	5%	8%	6%	8%	6%	6%
Grand Total	52516	52581	53783	53902	54903	56424	56750	58130	58523	60364

Administrators	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Exit Next Year	90	73	121	192	105	193	122	166	121	139
Retained to Next Year	2393	2430	2391	2276	2382	2337	2434	2412	2517	2556
<i>Attrition Rate</i>	4%	3%	5%	8%	4%	8%	5%	6%	5%	5%
Administrators Total	2483	2503	2512	2468	2487	2530	2556	2578	2638	2695

Professional Staff	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Exit Next Year	140	143	272	412	295	439	306	395	363	328
Retained to Next Year	3273	4357	4621	4485	4904	4907	5130	5203	5274	5418
<i>Attrition Rate</i>	4%	3%	6%	8%	6%	8%	6%	7%	6%	6%
Professional Staff Total	3413	4500	4893	4897	5199	5346	5436	5598	5637	5746

Teachers	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Exit Next Year	2727	1841	2487	3536	2530	3898	2920	3964	3187	3371
Retained to Next Year	43893	43737	43891	43001	44687	44650	45838	45990	47061	48552
<i>Attrition Rate</i>	6%	4%	5%	8%	5%	8%	6%	8%	6%	6%
Teachers Total	46620	45578	46378	46537	47217	48548	48758	49954	50248	51923

Educator Attrition by Level of Experience


 Note: Attrition rates vary by level of experience. New educators with less than 3 years experience exit at rates in excess of 10 percent per year. Educators with over 10 years experience and less than 28 years exit at rates that rarely exceed 5 percent. Above 27 years, the rate of attrition increases greatly. (see figure 2)

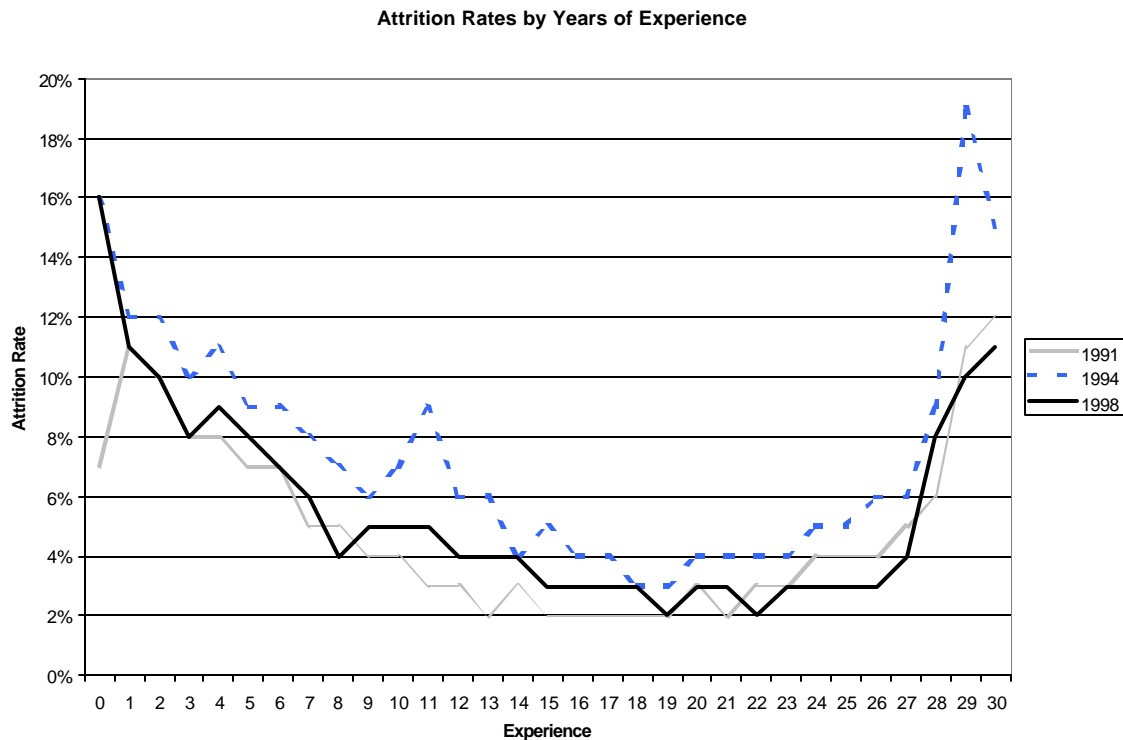
Table 17: Attrition by Years of Experience 0 to 30 Years

Level of Experience	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	Difference in attrition rate from 1989 to 1998	Difference in attrition rate from 1994 and 1998
0	12%	7%	7%	13%	13%	16%	13%	17%	15%	16%	4%	0%
1	13%	10%	11%	14%	10%	12%	11%	13%	12%	11%	-2%	-1%
2	12%	8%	10%	13%	7%	12%	10%	12%	10%	10%	-2%	-2%
3	9%	6%	8%	12%	8%	10%	8%	10%	9%	8%	-1%	-2%
4	8%	6%	8%	10%	8%	11%	8%	10%	9%	9%	1%	-2%
5	7%	5%	7%	9%	6%	9%	7%	9%	8%	8%	1%	-1%
6	6%	5%	7%	9%	6%	9%	8%	10%	7%	7%	1%	-2%
7	7%	4%	5%	8%	5%	8%	6%	7%	7%	6%	-1%	-2%
8	7%	4%	5%	7%	4%	7%	5%	7%	6%	4%	-3%	-3%
9	4%	4%	4%	7%	4%	6%	5%	6%	6%	5%	1%	-1%
10	4%	3%	4%	7%	4%	7%	4%	6%	5%	5%	1%	-2%
11	3%	2%	3%	5%	3%	9%	4%	5%	4%	5%	2%	-4%
12	3%	2%	3%	5%	3%	6%	4%	5%	5%	4%	1%	-2%
13	2%	2%	2%	4%	3%	6%	4%	4%	4%	4%	2%	-2%
14	3%	2%	3%	5%	3%	4%	3%	4%	4%	4%	1%	0%
15	2%	2%	2%	4%	2%	5%	3%	3%	4%	3%	1%	-2%
16	2%	2%	2%	3%	2%	4%	2%	3%	2%	3%	1%	-1%
17	2%	2%	2%	3%	2%	4%	2%	3%	3%	3%	1%	-1%
18	3%	1%	2%	4%	2%	3%	2%	3%	3%	3%	0%	0%
19	2%	2%	2%	4%	1%	3%	2%	3%	3%	2%	0%	-1%
20	3%	2%	3%	4%	2%	4%	2%	3%	2%	3%	0%	-1%
21	3%	2%	2%	4%	2%	4%	2%	3%	2%	3%	0%	-1%
22	3%	2%	3%	3%	3%	4%	3%	3%	3%	2%	-1%	-2%
23	3%	2%	3%	4%	2%	4%	2%	4%	3%	3%	0%	-1%
24	4%	3%	4%	6%	3%	5%	3%	3%	3%	3%	-1%	-2%
25	4%	4%	4%	5%	3%	5%	4%	4%	3%	3%	-1%	-2%
26	3%	3%	4%	4%	4%	6%	4%	4%	3%	3%	0%	-3%
27	4%	3%	5%	6%	4%	6%	4%	5%	5%	4%	0%	-2%
28	6%	3%	6%	9%	8%	9%	8%	13%	9%	8%	2%	-1%
29	10%	7%	11%	17%	14%	19%	13%	18%	10%	10%	0%	-9%
30	11%	8%	12%	17%	13%	15%	11%	19%	9%	11%	0%	-4%

Table 18: Attrition by Years of Experience 31 to 55 Years

Level of Experience	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	Difference 1989 and 1998	Difference 1994 and 1998
31	8%	9%	14%	16%	12%	17%	13%	17%	9%	9%	1%	-8%
32	13%	8%	18%	17%	13%	17%	11%	21%	10%	11%	-2%	-6%
33	11%	7%	16%	21%	13%	19%	13%	20%	12%	12%	1%	-7%
34	11%	7%	15%	19%	13%	20%	17%	22%	14%	13%	2%	-7%
35	11%	10%	17%	24%	16%	22%	20%	29%	14%	11%	0%	-11%
36	10%	13%	21%	29%	19%	24%	20%	21%	17%	21%	11%	-3%
37	19%	17%	22%	32%	18%	24%	23%	28%	23%	12%	-7%	-12%
38	24%	14%	25%	30%	19%	35%	22%	33%	16%	23%	-1%	-12%
39	18%	13%	31%	35%	36%	32%	31%	37%	27%	23%	5%	-9%
40	28%	22%	21%	46%	22%	45%	38%	34%	36%	30%	2%	-15%
41	26%	22%	32%	35%	32%	34%	41%	56%	23%	39%	13%	5%
42	43%	22%	41%	37%	27%	40%	24%	50%	19%	22%	-21%	-18%
43	33%	10%	28%	40%	24%	47%	55%	52%	27%	29%	-4%	-18%
44	26%	30%	28%	50%	17%	45%	22%	40%	8%	38%	12%	-7%
45	23%	13%	50%	23%	27%	40%	23%	43%	33%	25%	2%	-15%
46	38%	0%	33%	43%	30%	18%	18%	20%	11%	25%	-13%	7%
47	25%	40%	9%	38%	50%	29%	20%	22%	0%	13%	-12%	-16%
48	33%	33%	0%	45%	40%	0%	40%	25%	0%	14%	-19%	14%
49	33%	50%	25%	0%	50%	33%	50%	67%	33%	14%	-19%	-19%
50	0%	0%	50%	67%	67%	33%	0%	0%	0%	0%	0%	-33%
51		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
52			50%	0%	100%	0%	0%	67%	0%	0%	0%	0%
53				0%	0%		100%	100%	100%	0%	0%	0%
54					100%	0%					0%	0%
55							100%				0%	0%

Figure 2: Attrition Rate by Level of Experience—0 to 30 Years



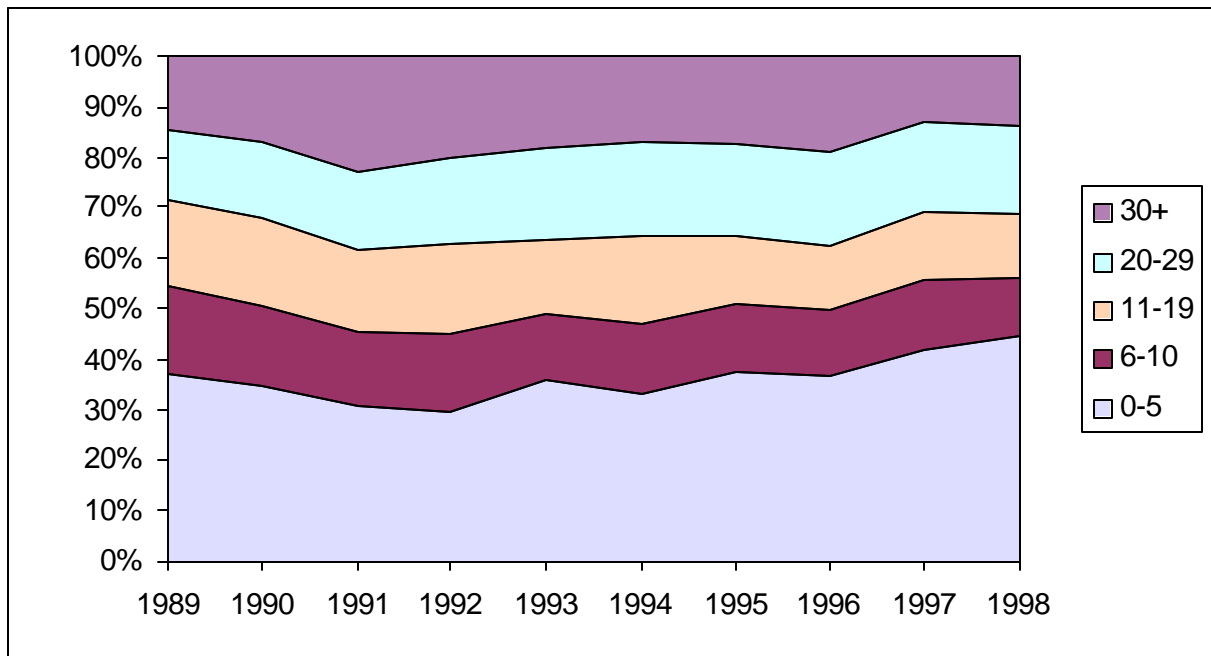
Note: The attrition rate share by level of experience (how each experience level group contributes to total attrition) remained relatively stable over the 8 years from 1989 to 1996. However in recent years (1997 and 1998) there has been a notable change. Exits of new teachers (with 0 to 5 years of experience) have increased as a share of total attrition, now accounting for more than 40 percent of total attrition. *In fact, the share of new teacher attrition has increased steadily from 1992.* This can be observed in figure 3. This is, in part, due to the increase in the share of new teachers to total educators as indicated in table 19 and figure 1.

Note: This increase in the share of new teachers has been offset by the decline in the share of attrition held by educators with 30+ years of experience. (Again, see figure 3)

Table 19: Number of Exits by Experience Level

Experience Level	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
0-5	1104	713	891	1210	1055	1494	1263	1667	1535	1701
6-10	507	324	423	655	382	624	437	576	498	446
11-19	499	364	451	743	427	792	455	570	513	499
20-29	412	307	459	700	526	861	614	854	652	657
30+	435	349	656	832	540	759	579	858	473	535
Total Attrition	2957	2057	2880	4140	2930	4530	3348	4525	3671	3838
Share of Attrition										
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
0-5	37%	35%	31%	29%	36%	33%	38%	37%	42%	44%
6-10	17%	16%	15%	16%	13%	14%	13%	13%	14%	12%
11-19	17%	18%	16%	18%	15%	17%	14%	13%	14%	13%
20-29	14%	15%	16%	17%	18%	19%	18%	19%	18%	17%
30+	15%	17%	23%	20%	18%	17%	17%	19%	13%	14%

Figure 3: Share of Attrition by Experience Levels of All Tennessee Educators



Attrition Rates of New Teachers

Note: The total attrition rate of new educators in the first 4 years of service shows total rates that 30 to 36 percent exit.

Note: Since 1992-93 more than 13 percent or more of new teachers exit after the first year of service, with first year exit rates ranging up to 17 percent.

Note: Of those that leave, we observe about 2 percent return to higher education (as we followed them back into the Tennessee IHE data).

Table 20: Attrition Numbers of New Entrants

Total Exit of New Entrants: Count												
	Exit Year											
Entry Year	90	91	92	93	94	95	96	97	98	Total Remain to Date	Total Exits to Date	Total New Entrants
90	83	169	152	56	80	52	58	42	31	787	723	1510
91		90	237	71	100	75	70	58	54	916	755	1671
92			166	121	124	68	69	66	43	807	657	1464
93				368	275	187	173	118	106	1583	1227	2810
94					378	198	189	131	117	1398	1013	2411
95						311	255	160	129	1514	855	2369
96							409	215	172	1598	796	2394
97								395	237	2075	632	2707
98									527	2747	527	3274

Table 21: Attrition Rates of New Entrants

Total Exit of New Entrants: Percentage												
	Exit Year											
Entry Year	90	91	92	93	94	95	96	97	98	Total Remain to Date	Total Exit to Date	Total New Entrants
90	5%	11%	10%	4%	5%	3%	4%	3%	2%	52%	48%	1510
91		5%	14%	4%	6%	4%	4%	3%	3%	55%	45%	1671
92			11%	8%	8%	5%	5%	5%	3%	55%	45%	1464
93				13%	10%	7%	6%	4%	4%	56%	44%	2810
94					16%	8%	8%	5%	5%	58%	42%	2411
95						13%	11%	7%	5%	64%	36%	2369
96							17%	9%	7%	67%	33%	2394
97								15%	9%	77%	23%	2707
98									16%	84%	16%	3274


Table 22: Attrition Numbers of New Entrants who Return for Addition Study to Tennessee IHEs, Exit of New Entrants with Subsequent Entry in IHE: Count


	Exit Year										
Entry Year	90	91	92	93	94	95	96	97	98	Total Exit to Date	Total New Entrants
90	14	16	14	5	8	6	5	3	2	73	1510
91		14	18	7	6	4	2	1	0	52	1671
92			33	15	13	5	5	3	0	74	1464
93				60	13	12	17	9	2	113	2810
94					51	10	17	8	6	92	2411
95						44	15	15	6	80	2369
96							53	9	3	65	2394
97								85	3	88	2707
98									88	88	3274


Table 23: Attrition Rates of New Entrants who Return for Addition Study to Tennessee IHEs, Exit of New Entrants with Subsequent Entry in IHE: Percentage


	Exit Year										
Entry Year	90	91	92	93	94	95	96	97	98	Total Exits to Date	Total New Entrants
90	1%	1%	1%	0%	1%	0%	0%	0%	0%	5%	1510
91		1%	1%	0%	0%	0%	0%	0%	0%	3%	1671
92			2%	1%	1%	0%	0%	0%	0%	5%	1464
93				2%	0%	0%	1%	0%	0%	4%	2810
94					2%	0%	1%	0%	0%	4%	2411
95						2%	1%	1%	0%	3%	2369
96							2%	0%	0%	3%	2394
97								3%	0%	3%	2707
98									3%	3%	3274


Re-entrants to the Education Workforce


 **DEFINITION:** Re-entrants are those educators who re-enter teaching after a number of years out of education. The longer the duration of exit from education, the lower the probability that an individual will return to education. This can be observed in the table below—as the percent for reentry for 1-year post exit is the highest in most all cases.

 Note: Re-entry rates of exiting educators, over time, have fluctuated---in terms of first year re-entry rates---since 1989 (the range being 5.5% to 16.1%).

 Note: Total reentry from a cohort of exiting educators in a particular year is approximately 16-18 percent over all time for educators. That is, one can expect over a 10-year period that about 16 to 18 percent of educators who leave will return. Or alternately, more than 80 percent never return.

 Note: Re-entry rates for women with less than 20 years of experience (of child-bearing age) is generally higher from 1989 for the first year of re-entry than for the total population of re-entrants.

 Note: Since 1989, educators who have greater than 20 years experience have had the lowest first year rates of re-entry .

 Note: Teachers have a bit higher rate of re-entry than educators as a whole.

 Note: Administrators have relatively low first year re-entry rates

Table 24: Reentry Rates for Tennessee Educators, All Educators

Year of Exit	Number of Years Post Exit, of Reentry									Total Percent Reentry	Total Reentry
	1	2	3	4	5	6	7	8	9		
1989	6.8%	2.5%	3.0%	1.8%	1.0%	0.9%	0.9%	0.8%	0.7%	18.4%	545
1990	5.5%	4.3%	2.5%	1.9%	1.4%	0.9%	0.8%	0.7%		18.0%	370
1991	7.8%	3.1%	1.9%	1.6%	0.7%	1.0%	0.6%			16.7%	483
1992	7.1%	7.4%	1.9%	1.1%	1.1%	0.9%				19.5%	807
1993	9.2%	3.0%	2.0%	1.3%	1.1%					16.6%	488
1994	10.8%	3.7%	1.7%	1.2%						17.4%	790
1995	12.2%	3.7%	2.1%							18.0%	603
1996	8.2%	4.4%								12.6%	571
1997	16.1%									16.1%	590

Table 25: Reentry Rates- Female Educators, with Less than 20 Years Experience

Year of Exit	Number of Years Post Exit, of Reentry									Total Percent Reentry	Total Reentry
	1	2	3	4	5	6	7	8	9		
1989	10.0%	3.7%	4.2%	2.1%	1.4%	1.6%	1.3%	1.2%	1.1%	26.6%	439
1990	8.3%	5.8%	3.4%	2.7%	2.0%	1.3%	1.3%	1.0%		25.8%	282
1991	12.0%	5.1%	3.1%	2.5%	0.7%	1.4%	1.1%			25.9%	360
1992	11.2%	8.8%	2.8%	1.7%	1.6%	1.4%				27.5%	582
1993	13.8%	4.4%	2.9%	1.9%	1.8%					24.8%	374
1994	16.1%	5.7%	2.3%	1.7%						25.8%	616
1995	17.6%	5.5%	3.1%							26.2%	453
1996	12.6%	6.8%								19.4%	427
1997	20.6%									20.6%	414

Table 26: Reentry Rates- Educators with Greater than 20 Years Experience

Year of Exit	Number of Years Post Exit, of Reentry									Total Percent Reentry	Total Reentry
	1	2	3	4	5	6	7	8	9		
1989	1.3%	0.2%	0.7%	0.7%	0.2%	0.0%	0.2%	0.1%	0.0%	3.4%	30
1990	1.2%	1.1%	0.6%	0.3%	0.0%	0.0%	0.0%	0.0%		3.2%	21
1991	1.9%	0.4%	0.4%	0.3%	0.0%	0.2%	0.1%			3.3%	36
1992	1.4%	4.6%	0.4%	0.2%	0.3%	0.1%				7.0%	109
1993	2.4%	1.0%	0.4%	0.5%	0.2%					4.5%	48
1994	2.5%	0.6%	0.7%	0.3%						4.1%	67
1995	3.1%	1.2%	0.3%							4.6%	55
1996	1.6%	1.2%								2.8%	49
1997	6.4%									6.4%	72

Table 27: Reentry Rates- Teachers

Year of Exit	Number of Years Post Exit, of Reentry									Total Percent Reentry	Total Reentry
	1	2	3	4	5	6	7	8	9		
1989	7.2%	2.6%	3.1%	1.9%	1.1%	1.0%	1.0%	0.7%	0.7%	19.3%	526
1990	5.6%	4.3%	2.7%	2.0%	1.5%	0.9%	0.8%	0.8%		18.6%	343
1991	8.3%	3.5%	2.1%	1.6%	0.6%	1.1%	0.6%			17.8%	441
1992	7.5%	7.2%	2.2%	1.2%	1.2%	1.0%				20.3%	719
1993	9.6%	3.2%	2.1%	1.3%	1.1%					17.3%	440
1994	11.7%	4.1%	1.7%	1.2%						18.7%	728
1995	13.0%	3.7%	2.3%							19.0%	556
1996	8.8%	4.6%								13.4%	531
1997	17.1%									17.1%	546

Table 28: Reentry Rates- Administrators

Year of Exit	Number of Years Post Exit, of Reentry									Total Percent Reentry	Total Reentry
	1	2	3	4	5	6	7	8	9		
1989	0.0%	2.2%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.5%	5
1990	2.7%	4.1%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%		8.2%	6
1991	0.8%	0.0%	0.0%	0.8%	0.8%	0.8%	0.0%			3.2%	4
1992	2.1%	10.9%	0.0%	0.5%	0.0%	0.5%				14.0%	27
1993	5.7%	1.9%	1.0%	1.0%	0.0%					9.6%	10
1994	2.6%	1.0%	0.0%	0.0%						3.6%	7
1995	4.1%	2.5%	0.0%							6.6%	8
1996	0.6%	1.8%								2.4%	4
1997	5.8%									5.8%	7

The Composition of Educator Hires


 Note: The composition of retained, re-entrant, and new entrant has remained stable over the categories of administrator, staff, and teachers from 1989-90 to 1998-99. Percentage of teachers who are new entrants, however, has increased fairly steadily over the past decade. It has increased significantly over the past two years, 1997-98 and 1998-99 to 6 percent.

Table 29: Composition of Educator Hires

Administrators							
Year	Total	Retained	Re-entrant	New Entrant	Retained	Re-entrant	New Entrant
1990	2503	2490	13	0	99.5%	0.5%	0.0%
1991	2512	2496	16	0	99.4%	0.6%	0.0%
1992	2468	2433	34	1	98.6%	1.4%	0.0%
1993	2487	2468	18	1	99.2%	0.7%	0.0%
1994	2530	2515	15	0	99.4%	0.6%	0.0%
1995	2556	2504	51	1	98.0%	2.0%	0.0%
1996	2578	2553	24	1	99.0%	0.9%	0.0%
1997	2638	2608	25	5	98.9%	0.9%	0.2%
1998	2695	2664	27	4	98.8%	1.0%	0.1%
1999	2750	2708	40	2	98.5%	1.5%	0.1%
Staff							
Year	Total	Retained	Re-entrant	New Entrant	Retained	Re-entrant	New Entrant
1990	4500	4336	115	49	96.4%	2.6%	1.1%
1991	4893	4700	138	55	96.1%	2.8%	1.1%
1992	4897	4741	107	49	96.8%	2.2%	1.0%
1993	5199	4884	201	114	93.9%	3.9%	2.2%
1994	5346	5093	154	99	95.3%	2.9%	1.9%
1995	5436	5092	222	122	93.7%	4.1%	2.2%
1996	5598	5330	156	112	95.2%	2.8%	2.0%
1997	5637	5366	149	122	95.2%	2.6%	2.2%
1998	5746	5429	180	137	94.5%	3.1%	2.4%
1999	5977	5605	207	165	93.8%	3.5%	2.8%
Teachers							
Year	Total	Retained	Re-entrant	New Entrant	Retained	Re-entrant	New Entrant
1990	45578	42733	1384	1461	93.8%	3.0%	3.2%
1991	46378	43328	1434	1616	93.4%	3.1%	3.5%
1992	46537	43729	1394	1414	94.0%	3.0%	3.0%
1993	47217	42410	2112	2695	89.8%	4.5%	5.7%
1994	48548	44365	1871	2312	91.4%	3.9%	4.8%
1995	48758	44298	2214	2246	90.9%	4.5%	4.6%
1996	49954	45519	2154	2281	91.1%	4.3%	4.6%
1997	50248	45631	2037	2580	90.8%	4.1%	5.1%
1998	51923	46759	2031	3133	90.1%	3.9%	6.0%
1999	53583	48213	2151	3219	90.0%	4.0%	6.0%

Note: Administrators have only 1 percent who are returnees, and less than 1 percent who are new entrants. Professional staff shows 2 percent new entrants and 3 percent who are returnees. These percentages are quite stable over the five-year period observed.

Note: The data show an increasing reliance on new entrants as a source of supply in hiring. However, school systems still rely heavily on attracting reentrants back into the profession (in table with gray background shading). In 1998-99 60 percent of new hires were new entrants.

Table 30: Hiring: Returnees and New Educators in Tennessee 1989-90 to 1998-99 (Number and Percent)

Group	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total New Entrants	1,510	1,671	1,464	2,810	2,411	2,369	2,394	2,707	3,274	3,386
Total Reentrants	1,512	1,588	1,535	2,331	2,040	2,487	2,334	2,211	2,238	2,398
Total Workforce Hires (New Entrants + Reentrants)	3,022	3,259	2,999	5,141	4,451	4,856	4,728	4,918	5,512	5,784
Percent New Entrants	50%	51%	49%	55%	54%	49%	51%	55%	59%	59%
Percent Reentrants	50%	49%	51%	45%	46%	51%	49%	45%	41%	41%
Administrators										
Administrative New Entrants			1	1		1	1	5	4	2
Administrative Reentrant From Previous Year	13	16	34	18	15	51	24	25	27	40
Total Hires	13	16	35	19	15	52	25	30	31	42
Percent New Entrants of Administrative Hires	0%	0%	3%	5%	0%	2%	4%	17%	13%	5%
Percent Reentrants of Administrative Hires	100%	100%	97%	95%	100%	98%	96%	83%	87%	95%
Professional Staff										
Professional Staff New Entrants	49	55	49	114	99	122	112	122	137	165
Professional Staff Reentrants From Previous Year	115	138	107	201	154	222	156	149	180	207
Total Hires	164	193	156	315	253	344	268	271	317	372
Percent New Entrants of Professional Staff Hires	30%	28%	31%	36%	39%	35%	42%	45%	43%	44%
Percent Reentrant of Professional Staff Hires	70%	72%	69%	64%	61%	65%	58%	55%	57%	56%
Teachers										
Teacher New Entrants	1,461	1,616	1,414	2,695	2,312	2,246	2,281	2,580	3,133	3,219
Teacher Reentrants From Previous Year	1,384	1,434	1,394	2,112	1,871	2,214	2,154	2,037	2,031	2,151
Total Hires	2,845	3,050	2,808	4,807	4,183	4,460	4,435	4,617	5,164	5,370
Percent New Entrant of Teacher Hires	51%	53%	50%	56%	55%	50%	51%	56%	61%	60%
Percent Reentrant of Teacher Hires	49%	47%	50%	44%	45%	50%	49%	44%	39%	40%

District Analysis of Educators


 Note: Tennessee is composed of a few large districts and many small ones, *14 districts account for 50 percent of the total educators, and 3 districts account for more than 25 percent of total educators.* On the other end of the spectrum, districts with less than 400 students account for 28 percent of all educators.

Table 31: Range of District Sizes by Number of Educators

Range of Student Enrollments for Districts	Number of Districts within that Range	Percent of Districts within that Range	Cumulative Percent of Districts within that Range	Total Educators for a Given Enrollment Range	Percent of Educators within that Range	Cumulative Percent of Educators within that Range
<100	29	21%	21%	2,031	3%	3%
100-200	28	21%	42%	4,144	7%	10%
200-300	24	18%	60%	5,797	9%	19%
300-400	17	13%	72%	5,719	9%	28%
400-500	13	10%	82%	5,767	9%	38%
500-600	7	5%	87%	3,839	6%	44%
600-700	4	3%	90%	2,703	4%	48%
700-800	1	1%	90%	758	1%	49%
800-900	2	1%	92%	1,647	3%	52%
900-1000	1	1%	93%	961	2%	54%
1000-2000	5	4%	96%	6,998	11%	65%
2000-3000	2	1%	98%	5,441	9%	74%
3000-4000	0	0%	98%	0	0%	0%
4000-5000	1	1%	99%	4,161	7%	80%
5000-6000	1	1%	99%	5,153	8%	89%
6000+	1	1%	100%	7,147	11%	100%


 Note: In 1996-97 there were 34 districts with no black educators. Now, in 1998-99, there are only 21 districts with no black educators. The districts with the highest percent of black educators are Memphis with 45%, followed by Fayette at 43%. *See Appendix 2 for a full list of districts.*

Table 32: Top Ten and Bottom Ten Districts by Percent Black in 1999

District	Black	Grand Total	Percent Black
MEMPHIS CITY	3,205	7,147	45%
FAYETTE	110	254	43%
DAVIDSON	1,121	5,153	22%
MADISON	229	1,064	22%
HARDEMAN	71	347	20%
COVINGTON CITY	12	61	20%
HAYWOOD	60	314	19%
HUMBOLDT CITY	29	157	18%
TIPTON	84	563	15%
SHELBY	380	2,652	14%
State Total	6,997	62,266	11%
BENTON	0	187	0%
CLINTON CITY	0	84	0%
DAYTON CITY	0	41	0%
DEKALB	0	184	0%
ETOWAH CITY	0	31	0%
GRAINGER	0	216	0%
GRUNDY	0	196	0%
JACKSON	0	125	0%
JOHNSON	0	179	0%
MEIGS	0	113	0%
MORGAN	0	239	0%
NEWPORT CITY	0	54	0%
ONEIDA CITY	0	84	0%
PICKETT	0	70	0%
POLK	0	169	0%
ROANE	0	437	0%
ROGERSVILLE CITY	0	51	0%
SEQUATCHIE	0	133	0%
SOUTH CARROLL SPECIAL	0	26	0%
STEWART	0	128	0%
VAN BUREN	0	69	0%


 Note: The districts with the greatest percent of educators with MA degrees or higher are Newport City at 80% and Pickett at 79%. The lowest in 1996-97 was Bells at 19%. Now in, 1998-99, the lowest is Alamo—but at a higher rate of 25%. See Appendix 3 for a full list of districts.

Table 33: Top Ten and Bottom Ten Districts by Degree Level of Educators in 1999

DISTRICT	Masters	Doctorate	Grand Total	Percent MA or Higher
NEWPORT CITY	42	1	54	80%
PICKETT	55		70	79%
MARYVILLE CITY	224	7	300	77%
ALCOA CITY	71	9	105	76%
OAK RIDGE CITY	258	11	370	73%
SEVIER	557	8	808	70%
MCMINN	248	4	366	69%
LENOIR CITY	89	3	135	68%
BRADFORD SPECIAL	27		40	68%
UNION CITY	80	1	120	68%
State Total	32,913	801	62,266	54%
CROCKETT COUNTY	42		109	39%
HOLLOW ROCK-BRUCETON	21		56	38%
CARTER	179	5	507	36%
W CARROLL SPEC DISTRICT	30		83	36%
CANNON	54		156	35%
LAUDERDALE	116	3	353	34%
SOUTH CARROLL SPECIAL	8		26	31%
LAKE	23		76	30%
BELLS CITY	7		27	26%
ALAMO CITY	11		44	25%


 Note: The district with the highest educator to student ratio is Johnson City at 39.5, and the lowest is Johnson City at 6.0. See Appendix 4 for a full list of districts.

Table 34: Total Student to Total Educator Ratio Over Time

District Name	1991	1992	1993	1994	1995	1996	1997	1998	1999	Change 1995-99
JOHNSON	33.2	32.2	33.9	37.3	36.4	34.1	37.7	35.6	39.5	9%
UNION CITY	17.2	17.9	18.8	20.1	22.3	24.1	25.7	26.4	26.7	20%
FRANKLIN CITY	27.2	28.1	25.6	25.1	24.7	23.5	23.1	23.3	21.5	-13%
MONTGOMERY	19.1	20.7	20.2	21.3	20.6	20.8	19.4	19.9	21.3	3%
SHELBY	22.7	23.1	21.3	20.6	20.9	20.8	20.9	19.7	20.0	-5%
TIPTON	21.2	22.2	21.4	22.7	22.3	20.8	19.6	18.9	19.2	-14%
CUMBERLAND	18.1	17.8	19.3	18.7	19.2	20.3	18.9	17.9	19.0	-1%
WILLIAMSON	18.0	18.3	16.7	19.3	18.2	19.3	18.9	18.1	19.0	4%
WILSON	19.3	19.3	20.8	21.5	20.3	20.3	20.6	19.3	18.8	-8%
STEWART	15.8	17.1	17.6	18.0	19.2	18.5	18.7	19.0	18.7	-3%
State Total	17.6	17.9	17.8	17.1	17.1	17.0	17.3	17.1	17.0	-1%
OAK RIDGE CITY	13.4	13.6	13.5	13.3	13.9	12.6	12.8	12.6	13.0	-6%
GRUNDY	13.9	13.8	13.8	14.2	14.1	13.9	14.0	12.5	12.5	-11%
GREENEVILLE CITY	12.3	13.1	12.4	11.8	12.1	11.6	11.8	11.9	11.8	-2%
CLAY	12.6	12.2	11.9	11.5	11.7	10.7	10.6	11.4	11.8	1%
CLINTON CITY	15.0	15.8	14.3	14.1	14.6	12.7	11.2	10.8	11.7	-20%
PICKETT	14.1	14.5	14.3	14.3	13.7	12.0	12.1	11.6	11.4	-17%
HANCOCK	13.6	13.4	12.3	12.4	12.1	12.3	11.6	10.6	10.4	-14%
FRANKLIN	10.0	9.9	9.9	9.8	9.7	10.6	10.4	10.9	9.7	1%
UNION	14.5	13.8	12.3	11.2	10.2	9.6	9.4	8.7	8.7	-14%
JOHNSON CITY	6.2	6.1	6.2	6.2	6.5	5.9	5.9	5.9	6.2	-5%


 Note: The district with the greatest percent of its workforce being non-teachers is Bradford and Van Buren with 25%. The lowest is Bells at 7 percent. *See Appendix 5 for a full list of districts.*

Table 35: Top Ten and Bottom Ten Districts by Percent Non-Teachers⁷ in Workforce in 1999

Districts	Administrators	Professional Staff	Grand Total	Percent Non-Teacher
BRADFORD SPECIAL	4	6	40	25%
VAN BUREN	3	14	69	25%
HANCOCK	7	16	105	22%
CLINTON CITY	4	14	84	21%
PICKETT	4	11	70	21%
FAYETTEVILLE CITY	6	9	71	21%
ALAMO CITY	3	6	44	20%
HOUSTON	6	12	94	19%
MANCHESTER CITY	5	13	94	19%
MOORE	5	7	63	19%
State Total	2,745	5,970	62,266	14%
OBION	11	25	302	12%
ROGERSVILLE CITY	2	4	51	12%
GREENE	25	32	491	12%
CUMBERLAND	16	32	415	12%
SOUTH CARROLL SPECIAL	2	1	26	12%
HENDERSON	12	15	235	11%
MCMINN	13	29	366	11%
GIBSON SPEC DISTRICT	9	7	142	11%
FRANKLIN	16	29	415	11%
BELLS CITY	2		27	7%

⁷ “Non-teachers” include all administrators and professional staff: see appendix 5


 Note: The district with the highest average experience for educators is Harriman with 20 years of experience. The lowest is Rogersville City with an average of 11 years of experience. *See Appendix 6 for a full list of districts.*

Table 36: Top Ten and Bottom Ten Districts by Average Experience in 1999

District	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
HARRIMAN CITY	16	16	17	18	18	17	17	19	19	20
UNION CITY	16	16	16	17	18	19	19	19	19	19
NEWPORT CITY	14	13	15	16	16	17	17	18	18	19
DYERSBURG CITY	16	16	15	16	17	17	18	18	19	19
MOORE	13	14	15	14	14	14	15	16	16	18
OBION	15	16	16	16	17	17	17	17	17	18
BRADFORD SPECIAL	15	16	17	16	17	16	17	17	18	17
SULLIVAN	16	17	17	17	17	18	18	17	17	17
BRISTOL CITY	16	15	16	16	16	16	16	17	17	17
CLINTON CITY	13	12	13	14	15	15	16	16	16	17
State Total	14	15	15	15	15	15	15	15	15	15
MACON	13	14	14	13	13	13	12	13	12	12
MONTGOMERYSCHS	14	15	14	13	13	13	13	13	12	12
LEWIS	12	12	13	12	12	12	13	13	13	12
HICKMAN	13	12	13	12	12	11	11	11	12	12
BELLS CITY	14	13	10	11	11	9	10	11	13	12
BLEDSON	11	12	13	11	11	12	12	12	12	12
ETOWAH CITY	10	10	10	10	10	11	12	12	13	11
CHEATHAM	11	11	12	12	11	11	11	11	12	11
UNION	13	13	13	12	12	12	12	13	12	11
ROGERSVILLE CITY	12	11	11	11	12	12	11	11	12	11

The Higher Education Connection

The analysis of institution of higher education (IHE) focuses on the number of candidates produced and what percentages of those candidates actually enter teaching. This analysis examines differences in public versus private IHEs, the percent entering by race/ethnicity and gender, and how particular IHEs provide entrants for particular districts.

Public IHE First Time Licensure Recipients

☞ Note: The number of bachelor degree recipients (BAs) seeking first time licensure in public institutions of higher education (IHEs) has dropped from a high in 1993 of 1350 persons, to a low in 1995 of 981 persons, to 1034 in 1997. In 1999 there were 1093 public BAs seeking first time teacher licensure.

☞ Note: The percent of white males has increased since 1993, but fallen from a high of 19% in 1995, to 14% in 1999.

☞ Note: Blacks (male and female) increased to 8% (80 persons) of recipients in 1996, then dropped to 6% (60 persons) in 1997, but has increased significantly to 10% (115 persons) in 1999.

Table 37: Public BAs Seeking *First Time* Teacher Licensure⁸

Race/Ethnicity	Gender	91		92		93		94		95		96		97		98		99	
White	Female	903	80%	1,022	81%	1,088	81%	886	78%	734	75%	818	76%	795	77%	862	75%	806	74%
White	Male	176	16%	171	14%	181	13%	179	16%	183	19%	168	16%	172	17%	194	17%	157	14%
Black	Female	37	3%	51	4%	62	5%	49	4%	48	5%	62	6%	52	5%	69	6%	99	9%
Black	Male	8	1%	5	0%	7	1%	9	1%	8	1%	18	2%	8	1%	15	1%	16	1%
Hispanic	Female	2	0%	4	0%	6	0%		0%	4	0%	3	0%	3	0%	1	0%	8	1%
Hispanic	Male	2	0%		0%	1	0%		0%		0%	3	0%		0%	1	0%		0%
Asian/Pacific Islander	Female		0%	1	0%	1	0%	2	0%	3	0%	3	0%	1	0%	3	0%	2	0%
Asian/Pacific Islander	Male		0%		0%		0%	1	0%		0%		0%		0%		0%	2	0%
Native American	Female		0%	2	0%	2	0%	1	0%		0%	1	0%		0%		0%	1	0%
Native American	Male		0%		0%		0%		0%		0%	1	0%		0%		0%		0%
Other	Female		0%	1	0%	1	0%	3	0%	1	0%		0%	3	0%	2	0%	2	0%
Other	Male		0%		0%	1	0%		0%		0%		0%		0%		0%		0%
Grand Total		1,128		1,257		1,350		1,130		981		1,077		1,034		1,147		1,093	

⁸ “Seeking” is the term used by the Tennessee Higher Education Commission to describe individuals training to obtain such licensure

Note: The number of public post-baccalaureates (including persons in the “non-degree” category) seeking first time teacher licensure in public IHEs has dropped from a high in 1996 of 940 persons, to 766 in 1997, and in 1999 is at 761 persons. .

Note: The percent white male is much higher for post-baccalaureates at around 19% to more than 20% for most years observed. However, in the most recent year, 1999, the rate dropped to 17 percent. The percent black is also higher for post-baccalaureates at 11% in 1996 (114 persons) and 10% in 1997 (73 persons). In 1999 this rate increased significantly to 16% (124 persons).

Table 38: Public Post BAs Seeking *First Time* Teacher Licensure (Includes Non-Degrees)

Race/Ethnicity	Gender	91		92		93		94		95		96		97		98		99	
White	Female	312	73%	565	75%	430	71%	468	68%	503	69%	616	66%	522	68%	392	66%	482	63%
White	Male	95	22%	142	19%	124	20%	147	21%	154	21%	206	22%	158	21%	126	21%	133	17%
Black	Female	10	2%	33	4%	32	5%	50	7%	39	5%	74	8%	52	7%	51	9%	99	13%
Black	Male	5	1%	6	1%	9	1%	10	1%	14	2%	30	3%	21	3%	17	3%	25	3%
Hispanic	Female	4	1%	4	1%	6	1%	3	0%	5	1%	5	1%	6	1%	8	1%	8	1%
Hispanic	Male	0	0%	1	0%	0	0%	2	0%	2	0%	1	0%	4	1%	0	0%	2	0%
Asian/Pacific Islander	Female	0	0%	0	0%	0	0%	0	0%	7	1%	5	1%	3	0%	2	0%	9	1%
Asian/Pacific Islander	Male	0	0%	0	0%	3	0%	2	0%	3	0%	1	0%	0	0%	0	0%	0	0%
Native American	Female	0	0%	1	0%	2	0%	1	0%	1	0%	0	0%	0	0%	0	0%	0	0%
Native American	Male	0	0%	0	0%	0	0%	1	0%	1	0%	2	0%	0	0%	0	0%	0	0%
Other	Female	0	0%	0	0%	1	0%	1	0%	2	0%	0	0%	0	0%	0	0%	3	0%
Other	Male		0%		0%		0%		0%		0%		0%		0%		0%		0%
Grand Total		426		752		607		685		731		940		766		596		761	

Private IHE First Time Licensure Recipients

Note: For private IHEs the number of BAs seeking first time licensure increased to an historical high of 877 in 1998, decreasing slightly to 842 in 1999.

Note: The percent black remains low, ranging between 1% to 5%, since 1991.

Table 39: Private BAs Seeking *First Time* Teacher Licensure


Race/Ethnicity	Gender	91	92	93	94	95	96	97	98	99									
White	Female	601	80%	601	77%	630	82%	525	77%	500	75%	556	77%	636	77%	681	78%	650	77%
White	Male	118	16%	115	15%	116	15%	139	20%	125	19%	130	18%	153	19%	149	17%	148	18%
Black	Female	20	3%	27	3%	12	2%	10	1%	18	3%	23	3%	17	2%	24	3%	23	3%
Black	Male	7	1%	5	1%	3	0%	3	0%	11	2%	6	1%	3	0%	10	1%	8	1%
Hispanic	Female	1	0%	9	1%	1	0%	3	0%	5	1%	3	0%	5	1%	5	1%	1	0%
Hispanic	Male	2	0%		0%	1	0%	3	0%	2	0%	3	0%		0%	1	0%	1	0%
Asian/Pacific Islander	Female	4	1%	19	2%	2	0%		0%	3	0%	1	0%	4	0%	5	1%	4	0%
Asian/Pacific Islander	Male		0%	4	1%		0%		0%		0%	2	0%	1	0%	1	0%	1	0%
Native American	Female		0%		0%		0%		0%		0%	2	0%	1	0%	1	0%	1	0%
Native American	Male		0%		0%		0%		0%		0%		0%	1	0%		0%		0%
Other	Female		0%		0%		0%		0%		0%		0%		0%		0%	3	0%
Other	Male		0%		0%		0%		0%		0%		0%		0%		0%	2	0%
Grand Total		753		780		765		683		664		726		821		877		842	

Note: The number of private IHE post-baccalaureates seeking first time teacher licensure, has increased to an historical high of 325 in 1999. Each year since 1997, the numbers have broke previous historical records. The number and percent of blacks has increased to 14% in 1999 (45 persons) exceeding the previous high of 12% in 1996.

Table 40: Private Post BAs Seeking *First Time* Teacher Licensure

Race/Ethnicity		Gender	91		92		93		94		95		96		97		98		99	
White		Female	126	71%	124	63%	111	58%	132	64%	142	59%	144	60%	163	64%	172	60%	213	66%
White		Male	36	20%	48	24%	59	31%	50	24%	66	27%	67	28%	66	26%	88	31%	56	17%
Black		Female	8	5%	9	5%	15	8%	16	8%	20	8%	16	7%	18	7%	21	7%	33	10%
Black		Male	3	2%	5	3%	3	2%	6	3%	9	4%	5	2%	4	2%	5	2%	12	4%
Hispanic		Female	1	1%	2	1%	0	0%	1	0%	1	0%	3	1%	0	0%	0	0%	1	0%
Hispanic		Male	2	1%	0	0%	1	1%	0	0%	0	0%	2	1%	0	0%	0	0%	2	1%
Asian/Pacific Islander		Female	1	1%	6	3%	1	1%	1	0%	3	1%	2	1%	3	1%	1	0%	4	1%
Asian/Pacific Islander		Male	0	0%	3	2%	0	0%	0	0%	0	0%	0	0%	1	0%	0	0%	1	0%
Native American		Female	0	0%	1	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Native American		Male																		
Other		Female	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	0%	0	0%	3	1%
Other		Male																		
Grand Total			177		198		190		206		241		239		256		287		325	

Public IHE First Time Licensure Recipients Entering Teaching

 **DEFINITION:** Table 41 shows 2-year yield rates (that is the percent of candidates that actually enter teaching over a 2 year period once eligible to enter) for public BAs seeking licensure for the first time. For example, given the available data at the time of this report, we can track those eligible in 1998 into the workforce in 1998 and 1999. This yield for those eligible from 1998 is reported as 1998 in the table below. We cannot report two year yields, given the data available at the time of this report, for those eligible in 1999.


 Note Yields for black males have increased to 88% in 1997 but dropped to 73% in 1998. That is, of those black males with BAs and first time licensure in 1997 88 percent entered teaching in 1997 and 1998. For those eligible in 1998, 73 percent entered over 1998 and 1999. In the last two years the yield rates have increased significantly for both genders for whites and blacks, and for female Hispanics.

Table 41: Yield Rates for Public BAs Seeking *First Time* Teacher Licensure

Race/Ethnicity	Gender	91	92	93	94	95	96	97	98
White	Female	40%	55%	56%	54%	59%	57%	64%	65%
White	Male	36%	49%	57%	50%	56%	51%	66%	62%
Black	Female	54%	67%	68%	65%	77%	74%	77%	83%
Black	Male	50%	100%	57%	56%	50%	72%	88%	73%
Hispanic	Female	50%	50%	67%		25%	33%	100%	100%
Hispanic	Male	0%		100%			0%		0%
Asian/Pacific Islander	Female		100%	0%	100%	67%	67%	100%	33%
Asian/Pacific Islander	Male				100%				
Native American	Female		50%	0%	100%		0%		
Native American	Male								
Other	Female								
Other	Male								
Grand Total		40%	55%	57%	54%	59%	57%	65%	66%


 Note: For post-baccalaureates, the yields are noticeably lower than for the BAs. Again, the yields have increased over the past two years.

Table 42: Yield Rates for Public Post BAs Seeking *First Time* Teacher Licensure

Race/Ethnicity	Gender	91	92	93	94	95	96	97	98
White	Female	25%	38%	20%	29%	23%	22%	43%	40%
White	Male	20%	42%	31%	28%	19%	25%	37%	37%
Black	Female	40%	45%	41%	42%	31%	23%	56%	33%
Black	Male	20%	33%	56%	30%	36%	20%	52%	59%
Hispanic	Female	0%	50%	0%	33%	40%	0%	50%	38%
Hispanic	Male		0%		0%	0%	100%	50%	
Asian/Pacific Islander	Female					14%	20%	67%	50%
Asian/Pacific Islander	Male			0%	0%	33%	0%		
Native American	Female		0%	50%	100%	0%			
Native American	Male				0%	0%	0%		
Other	Female			100%	0%	50%			
Other	Male					100%	50%		
Grand Total		24%	39%	24%	29%	23%	23%	43%	39%

Private IHE First Time Licensure Recipients Entering Teaching

Note: For private BAs seeking licensure for the first time, the yield rates are substantially lower than the rates for the public IHEs for all categories. The highest yield (substantially higher than other categories) is for black females at 65% in 1997 and black males at 67% in 1997. In the most recent year (1998), the two-year yield rates for blacks have dropped considerably.⁹

Table 43: Yield rates for Private BAs Seeking *First Time* Teacher Licensure

Race/Ethnicity	Gender	91	92	93	94	95	96	97	98
White	Female	29%	37%	35%	35%	36%	35%	42%	42%
White	Male	17%	39%	34%	33%	31%	38%	33%	42%
Black	Female	50%	41%	33%	40%	61%	61%	65%	33%
Black	Male	29%	60%	33%	0%	36%	33%	67%	20%
Hispanic	Female	0%	0%	0%	0%	60%	33%	9%	20%
Hispanic	Male	0%		0%	33%	0%	33%		0%
Asian/Pacific Islander	Female	0%	58%	0%		33%	0%	25%	40%
Asian/Pacific Islander	Male		75%				0%	100%	0%
Native American	Female						50%	0%	0%
Native American	Male							0%	
Other	Female								
Other	Male								
Total		27%	38%	35%	35%	36%	36%	40%	41%


Note: For private post-baccalaureates the yields are somewhat lower as compared to private BAs

Table 44: Yield Rates for Private Post BAs Seeking *First Time* Teacher Licensure

Race/Ethnicity	Gender	91	92	93	94	95	96	97	98
White	Female	33%	37%	43%	25%	29%	37%	45%	38%
White	Male	19%	52%	37%	40%	29%	28%	36%	36%
Black	Female	75%	44%	53%	56%	40%	44%	50%	43%
Black	Male	67%	80%	67%	67%	44%	20%	25%	0%
Hispanic	Female	0%	50%		0%	0%	33%		
Hispanic	Male	50%		0%			100%		
Asian/Pacific Islander	Female	0%	50%	0%	0%	0%	0%	33%	0%
Asian/Pacific Islander	Male		67%					0%	
Native American	Female		0%						
Native American	Male								
Other	Female							100%	
Other	Male								
Total		32%	43%	42%	32%	30%	35%	43%	37%

⁹ Data provided for the years 1998 and 1999 from private institutions of higher education was incomplete; a number of schools' data were missing. Thus, the yield rates from 1998, for private institutions of higher education, are not based on all private institutions of higher education.

Entrance in Public Education by IHE Major

 **DEFINITION:** Table 45 shows the *number* of public IHE majors, for all degree levels, who enter over time, and the *percent* who enter. Since 1995, Tennessee has required an academic major in all teaching areas except special education, physical education, and some vocational areas. In all other areas, education majors who entered the work force after 1995 likely received their preparation and license prior to 1995. In these tables, we are tracking first time entrants (i.e., no previous experience has been recorded).


 **Note:** For public IHEs, the greatest number of entrants over the past 5 years has been those with majors in elementary education, multi/interdisciplinary studies, special education, and “no major”—meaning individuals where no major was indicated in their IHE record (i.e., post-baccalaureate pursuit of first time licensure). These items are shaded gray in the table.

Table 45: Public IHE Majors by Area Eligible from 1990 to 1999, Number of Entrants from 1990 to 1999: *First Time* Licensure for Teaching, Sorted by Percent Entry

Area	Major	90	91	92	93	94	95	96	97	98	99	No Record of Entry	Total Entry	Grand Total	Percent Entry
Early Childhood and Elementary Education															
	Education, Elementary	243	343	268	501	500	265	99	58	38	30	1211	2345	3556	66%
	Multi/Interdisciplinary Studies	4	8	10	8	12	137	339	424	486	422	716	1850	2566	72%
	Education, Elem/EC	56	50	67	123	93	62	38	45	46	35	302	615	917	67%
	Lib Arts, Sci/Gen Studs, Hum		4	3	6	4	11	13	26	24	24	28	115	143	80%
	Area/Ethnic/Cultural Studies					3	14	9	4			12	30	42	71%
	Education, Reading		1			1	1					8	3	11	27%
Fine Arts	Visual & Performing Arts, Music	3	4	4	9	4	5	9	15	20	23	57	96	153	63%
	Education, Music	6	11	8	8	12	11	12	5	8	2	75	83	158	53%
	Education, Art	2	3	2	5	4	10	7	5	3	6	32	47	79	59%
	Visual & Performing Arts, Theater	2	1		8	10	6	2	2	5	1	16	37	53	70%
	Visual & Performing Arts, Other	2	5		6	1	1	3	2	4	3	20	27	47	57%
General	No Major	132	114	171	187	153	175	187	224	219	115	1955	1677	3632	46%
	Education, General	18	39	42	82	68	64	36	57	46	28	1033	480	1513	32%
	Education, K-12				1				1	1	1	1	4	5	80%
	Communications				1								1	1	100%

Area	Major	90	91	92	93	94	95	96	97	98	99	No Record of Entry	Total Entry	Grand Total	Percent Entry
Health and Physical Education	Health & Physical Ed	1		4	29	29	39	38	25	44	28	182	237	419	57%
	Education, Physical Education	15	28	10	17	2	3				2	71	77	148	52%
	Education, Health	1	1	2	1	3	2	3		1	2	16	16	32	50%
	Health Professions & Rel Sci								1	3		1	4	5	80%
Other Professional Staff	Education, Counselor	2	5	5	7	3	7	7	3	7	4	172	50	222	23%
	Education, Administration	2	9	5	6	2	1		2	1	1	186	29	215	13%
	Social Work								3			3	3	6	50%
Secondary	Education, Secondary	50	40	44	108	76	64	47	34	53	26	421	542	963	56%
	English Language/Lit/Letters	10	9	10	19	18	13	20	13	13	10	106	135	241	56%
	Mathematics	8	13	9	10	17	10	9	10	13	8	64	107	171	63%
	Education, English	12	6	1	3	4	6	7	8	8	6	42	61	103	59%
	Social Sciences & History, Other	2	3	3	8	7	12	15		2	3	24	55	79	70%
	History	3	4	3	7	6	7	2	4	7	9	85	52	137	38%
	Biological Sciences/Life Sciences	4	2	4	3	6	6	2	2	6	4	38	39	77	51%
	Education, Math	6	4	1		6	6	4	5	4	3	33	39	72	54%
	Education, Social Studies	5	5	4		1		1	2	3	3	29	24	53	45%
	Psychology	3		1	3	2	3	1	2	4	3	40	22	62	35%
	Foreign Languages & Lits, Other	1	1	1	4	1	1	1	2	5	1	21	18	39	46%
	Education, Science	1	3		2	3		1	2	4	1	21	17	38	45%
	Education, Social Studies: History							5	4	5	2	9	16	25	64%
	Education, Science: Biology								2	5	2	6	9	15	60%
	Government		1		1	1		1	1	1	1	1	7	8	88%
	Physical Sciences, Chemistry	1		1	1	1	1				1	5	6	11	55%
	Education, Foreign Language		2	1						1		6	4	10	40%
	Sociology		2		1							3	3	6	50%
	Social Sciences & History, Geography								1		1	2	2	4	50%

Area	Major	90	91	92	93	94	95	96	97	98	99	No Record of Entry	Total Entry	Grand Total	Percent Entry
Secondary	Conserv & Renewable Nat Res										1		1	1	100%
	Education, Foreign Language: French						1						1	1	100%
	Foreign Languages & Lits, French						1					1	1	2	50%
	Physical Sciences, Geology				1							1	1	2	50%
	Physical Sciences, Other			1									1	1	100%
	Physical Sciences, Physics		1									3	1	4	25%
	Education, Science: Chemistry											1	0	1	0%
	Foreign Languages & Lits, Spanish											1	0	1	0%
	Law & Legal Studies											1	0	1	0%
	Philosophy & Religion											1	0	1	0%
Special Education	Education, Special	57	67	45	86	95	64	78	86	63	44	447	685	1132	61%
	Speech-Language Pathology			1	4	6	8	1	4	1	3	44	28	72	39%
Vocational Education	Home Economics		3	2	2	1	4	7	22	18	20	65	79	144	55%
	Education, Business	3	5	3	7	11	11	5	9	6	8	47	68	115	59%
	Agricultural Sciences	3	1	1	5	1	2	3	5	5	6	24	32	56	57%
	Education, Home Economics	1	3	2	8	4	2	2	1		1	20	24	44	55%
	Education, Agriculture	2	2		1	5	3	2	1	2	1	7	19	26	73%
	Education, Technology	1	5	2	5	1			4			24	18	42	43%
	Business Mgmt & Admin Svcs				1		2		1			4	4	8	50%
	Engineering-Related Techs					2				1		5	3	8	38%
	Engineering						1						1	1	100%
	Protective Services											1	0	1	0%
	Grand Total	662	808	741	1295	1179	1042	1016	1127	1186	895	7750	9951	17701	56%


Note: The Table 46 below shows the number of positions public IHE majors take upon first being hired, table 47 that will follow shows what percentage of a position comes from a particular major.

Table 46: All Levels, Public IHE majors eligible since 1990, first licensure recipients, Mapped into Positions: 1990-99, Sorted by Percent the Degree Major Entrants are of Total New Entrants from Tennessee Public IHEs.

Area	Major	Early Childhood Education	Kindergarten Teachers	Elementary Teachers	Middle School Teachers	Jr. High School Teachers	HS Business	HS Foreign Language	HS Language Arts	HS Mathematics	HS Other	HS Science	HS Social Studies	HS Vocational Ed.	Special Education	Librarians	Guidance Counselors	Other Professional Staff	Elem. Principals	Supervisors	Grand Total	Percent of Total Licensure Recipients Who Enter
Early Childhood and Elementary Education	Education, Elementary	16	144	1264	484	234			1	5	28	1		4	118	15	11	20			2345	24%
	Multi/Interdisciplinary Studies	5	220	880	335	259		1	1	2	61	13		1	53	11	5	2		1	1850	19%
	Education, Elem/EC	19	237	274	42	12					6			2	14	2		7			615	6%
	Lib Arts, Sci/Gen Studs, Hum		7	65	26	12					1				3			1			115	1%
	Area/Ethnic/Cultural Studies			15	10	5															30	0%
	Education, Reading		1	1											1						3	0%
Fine Arts	Visual & Performing Arts, Music		1	57	4				2	1	25			5				1			96	1%
	Education, Music		1	47	2	2				1	29						1				83	1%
	Education, Art			32	1	2					7			1	4						47	1%
	Visual & Performing Arts, Theater			1					2		1			1	7			25			37	0%
	Visual & Performing Arts, Other		1	17						1	7			1							27	0%
General	No Major	13	72	468	173	190	28	24	35	28	211	53	49	76	154	8	17	77		1	1677	17%
	Education, General	1	43	155	72	50	1	4	10	12	55	7	10	7	21	5	8	19			480	5%
	Education, K-12																4				4	0%
	Communications										1										1	0%

Area	Major	Early Childhood Education	Kindergarten Teachers	Elementary Teachers	Middle School Teachers	Jr. High School Teachers	HS Business	HS Foreign Language	HS Language Arts	HS Mathematics	HS Other	HS Science	HS Social Studies	HS Vocational Ed.	Special Education	Librarians	Guidance Counselors	Other Professional Staff	Elem. Principals	Supervisors	Grand Total	Percent of Total Licensure Recipients Who Enter
Health and Physical Education	Health & Physical Ed		1	108	13	31				4	56	7	5	2	9				1		237	2%
	Education, Physical Education			38	5	8			1	2	16	5	1		1						77	1%
	Education, Health			1		6				1	4	3			1						16	0%
	Health Professions & Rel Sci			2	1						1										4	0%
Other Professional Staff	Education, Counselor			6	2	1	1			1	3		1		4		26	5			50	1%
	Education, Administration	1	1	6	2	5	1		1	2	3		1		6						29	0%
	Social Work																	3			3	0%
Secondary	Education, Secondary	1	1	27	26	110	4	12	25	52	128	43	38	21	43	4	3	4			542	5%
	English Language/Lit/Letters			3	7	26		7	39	1	44	1	1	2	1	3					135	1%
	Mathematics			1	2	21		1	1	58	21			1				1			107	1%
	Education, English				5	15			23		13	1			3			1			61	1%
	Social Sciences & History, Other				2	17		1	1		14		15	2	3						55	1%
	History			5	3	15					11		15		3						52	1%
	Biological Sciences/Life Sciences				2	9	1				13	12			2						39	0%
	Education, Math			2		5			1	20	9			2							39	0%
	Education, Social Studies					10					6		6		1	1					24	0%
	Psychology			2								1			2			17			22	0%
	Foreign Languages & Lits, Other				1	1		8	1		7										18	0%
	Education, Science			2	1	5					3	6									17	0%
	Education, Social Studies: History				1	5					5		4	1							16	0%
	Education, Science : Biology				1	1						7									9	0%

Area	Major	Early Childhood Education	Kindergarten Teachers	Elementary Teachers	Middle School Teachers	Jr. High School Teachers	HS Business	HS Foreign Language	HS Language Arts	HS Mathematics	HS Other	HS Science	HS Social Studies	HS Vocational Ed.	Special Education	Librarians	Guidance Counselors	Other Professional Staff	Elem. Principals	Supervisors	Grand Total	Percent of Total Licensure Recipients Who Enter
Secondary	Government					1							4	1	1						7	0%
	Physical Sciences, Chemistry		1								3	2									6	0%
	Education, Foreign Language					1		2			1										4	0%
	Sociology					1					1					1					3	0%
	Social Sciences & History, Geography					1							1								2	0%
	Conserv & Renewable Nat Res											1									1	0%
	Education, Foreign Language: French					1															1	0%
	Foreign Languages & Lits, French					1															1	0%
	Physical Sciences, Geology					1															1	0%
	Physical Sciences, Other										1										1	0%
	Physical Sciences, Physics									1											1	0%
Special Education	Education, Special	7	4	16	7	11					7			1	624		2	6			685	7%
	Speech-Language Pathology			1											8			19			28	0%
Vocational Education	Home Economics	3	19	36	1	2			1		6			11							79	1%
	Education, Business		1	1	1	4	21		1	3	10		3	18	1		2	2			68	1%
	Agricultural Sciences					1					3	4		24							32	0%
	Education, Home Economics			3	1	2					1			15	1		1				24	0%
	Education, Agriculture			1			1			1	2	1		12	1						19	0%
	Education, Technology			2		5					3			7		1					18	0%
	Business Mgmt & Admin Svcs			1			2							1							4	0%
	Engineering-Related Techs			1		1								1							3	0%
	Engineering														1						1	0%
	Grand Total	66	755	3541	1233	1090	60	60	146	196	827	168	154	220	1091	51	80	210	1	2	9951	

 **DEFINITION:** The columns add to 100% ---so each cells shows the participation by major to a particular position. For example for “Early Childhood Education” majors in Elementary Teacher Education contribute 24 percent to entrants, No Major contributes 20 percent, etc.


 **Note:** Special education, as a position, draws 57% of its entrants from the special education major. “No Major” as a major contributes substantially to the high school positions of business, foreign language, other, science, social studies, vocational education, guidance counselors, other professional staff, and supervisors.


Table 47: Percent of Public IHE Majors, first licensure recipients, Entry by Position: 1990 to 1999

Area	MAJOR	Early Childhood Education	Kindergarten Teachers	Elementary Teachers	Middle School Teachers	Jr. High School Teachers	HS Business	HS Foreign Language	HS Language Arts	HS Mathematics	HS Other	HS Science	HS Social Studies	HS Vocational Ed.	Special Education	Librarians	Guidance Counselors	Other Professional Staff	Elem. Principals	Supervisors	Grand Total	Percent of Total
Early Childhood and Elementary Education	Education, Elementary	24%	19%	36%	39%	21%			1%	3%	3%	1%		2%	11%	29%	14%	10%			2345	24%
	Multi/Interdisciplinary Studies	8%	29%	25%	27%	24%		2%	1%	1%	7%	8%		0%	5%	22%	6%	1%		50%	1850	19%
	Education, Elem/EC	29%	31%	8%	3%	1%					1%			1%	1%	4%		3%			615	6%
	Lib Arts, Sci/Gen Studs, Hum		1%	2%	2%	1%					0%				0%			0%			115	1%
	Area/Ethnic/Cultural Studies			0%	1%	0%															30	0%
	Education, Reading		0%	0%											0%						3	0%
Fine Arts	Visual & Performing Arts, Music		0%	2%	0%				1%	1%	3%			2%				0%			96	1%
	Education, Music		0%	1%	0%	0%				1%	4%						1%				83	1%
	Education, Art			1%	0%	0%					1%			0%	0%						47	1%
	Visual & Performing Arts, Theater			0%					1%		0%			0%	1%			12%			37	0%
	Visual & Performing Arts, Other		0%	0%						1%	1%			0%							27	0%

Area	MAJOR	Early Childhood Education	Kindergarten Teachers	Elementary Teachers	Middle School Teachers	Jr. High School Teachers	HS Business	HS Foreign Language	HS Language Arts	HS Mathematics	HS Other	HS Science	HS Social Studies	HS Vocational Ed.	Special Education	Librarians	Guidance Counselors	Other Professional Staff	Elem. Principals	Supervisors	Grand Total	Percent of Total
General	No Major	20%	10%	13%	14%	17%	47%	40%	24%	14%	26%	32%	32%	35%	14%	16%	21%	37%		50%	1677	17%
	Education, General	2%	6%	4%	6%	5%	2%	7%	7%	6%	7%	4%	6%	3%	2%	10%	10%	9%			480	5%
	Education, K-12																5%				4	0%
	Communications										0%										1	0%
Health and Physical Education	Health & Physical Ed		0%	3%	1%	3%				2%	7%	4%	3%	1%	1%				100%		237	2%
	Education, Physical Education			1%	0%	1%			1%	1%	2%	3%	1%		0%						77	1%
	Education, Health			0%		1%				1%	0%	2%			0%						16	0%
	Health Professions & Rel Sci			0%	0%						0%										4	0%
Other Professional Staff	Education, Counselor			0%	0%	0%	2%			1%	0%		1%		0%		33%	2%			50	1%
	Biological Sciences/Life Sciences				0%	1%	2%				2%	7%			0%						39	0%
	Education, Administration	2%	0%	0%	0%	0%	2%		1%	1%	0%		1%		1%						29	0%
Secondary	Social Work																	1%			3	0%
	Education, Secondary	2%	0%	1%	2%	10%	7%	20%	17%	27%	15%	26%	25%	10%	4%	8%	4%	2%			542	5%
	English Language/Lit/Letters			0%	1%	2%		12%	27%	1%	5%	1%	1%	1%	0%	6%					135	1%
	Mathematics			0%	0%	2%		2%	1%	30%	3%			0%				0%			107	1%
	Education, English				0%	1%			16%		2%	1%			0%			0%			61	1%
	Social Sciences & History, Other				0%	2%		2%	1%		2%		10%	1%	0%						55	1%
	History			0%	0%	1%					1%		10%		0%						52	1%
	Education, Math			0%		0%			1%	10%	1%			1%							39	0%

Area	MAJOR	Early Childhood Education	Kindergarten Teachers	Elementary Teachers	Middle School Teachers	Jr. High School Teachers	HS Business	HS Foreign Language	HS Language Arts	HS Mathematics	HS Other	HS Science	HS Social Studies	HS Vocational Ed.	Special Education	Librarians	Guidance Counselors	Other Professional Staff	Elem. Principals	Supervisors	Grand Total	Percent of Total
Secondary	Education, Social Studies					1%					1%		4%		0%	2%					24	0%
	Psychology			0%								1%			0%			8%			22	0%
	Foreign Languages & Lits, Other				0%	0%		13%	1%		1%										18	0%
	Education, Science			0%	0%	0%					0%	4%									17	0%
	Education, Social Studies: History				0%	0%					1%		3%	0%							16	0%
	Education, Science: Biology				0%	0%						4%									9	0%
	Government					0%							3%	0%	0%						7	0%
	Physical Sciences, Chemistry		0%								0%	1%									6	0%
	Education, Foreign Language					0%		3%			0%										4	0%
	Social Sciences & History, Geography					0%							1%								2	0%
	Conserv & Renewable Nat Res											1%									1	0%
	Education, Foreign Language:French					0%															1	0%
	Foreign Languages & Lits, French					0%															1	0%
	Physical Sciences, Geology					0%															1	0%
	Physical Sciences, Other										0%										1	0%
	Physical Sciences, Physics									1%											1	0%
Special Education	Education, Special	11%	1%	0%	1%	1%					1%			0%	57%		3%	3%			685	7%
	Speech-Language Pathology			0%											1%			9%			28	0%

Area	MAJOR	Early Childhood Education	Kindergarten Teachers	Elementary Teachers	Middle School Teachers	Jr. High School Teachers	HS Business	HS Foreign Language	HS Language Arts	HS Mathematics	HS Other	HS Science	HS Social Studies	HS Vocational Ed.	Special Education	Librarians	Guidance Counselors	Other Professional Staff	Elem. Principals	Supervisors	Grand Total	Percent of Total
Vocational Education	Home Economics	5%	3%	1%	0%	0%			1%		1%			5%							79	1%
	Education, Business		0%	0%	0%	0%	35%		1%	2%	1%		2%	8%	0%		3%	1%			68	1%
	Agricultural Sciences					0%					0%	2%		11%							32	0%
	Education, Home Economics			0%	0%	0%					0%			7%	0%		1%				24	0%
	Education, Agriculture			0%			2%			1%	0%	1%		5%	0%						19	0%
	Education, Technology			0%		0%					0%			3%		2%					18	0%
	Business Mgmt & Admin Svcs			0%			3%							0%							4	0%
	Engineering -Related Techs			0%		0%								0%							3	0%
	Engineering														0%						1	0%

 **DEFINITION:** Table 48 shows the *number* of private IHE majors, for all degree levels, who enter over time, and the *percent* who enter. Since 1995, Tennessee has required an academic major in all teaching areas except special education, physical education, and some vocational areas. In all other areas, education majors who entered the work force after 1995 likely received their preparation and license prior to 1995. We are tracking first time entrants (i.e., no previous experience has been recorded).


 **Note:** As with public IHEs, the greatest number of entrants over the past 5 years has been elementary teacher education, multi/interdisciplinary studies, and special education (shown with gray background in table)—meaning individuals where no major was indicated in their IHE record (i.e., post-baccalaureate pursuit of first time licensure).

Table 48: Private IHE Majors by Area, Number of Entrants from 1993 to 1997: *First Time* Licensure for Teaching, Grouped by Area

Area		90	91	92	93	94	95	96	97	98	99	No Record of Entry	Total Entry	Grand Total	Percent Entry
Early Childhood and Elementary Education	Elementary Teacher Education	101	130	161	236	168	110	67	62	60	41	1512	1136	2648	43%
	Multi/Interdisc Studs, Oth		1	5	4	18	54	80	98	107	105	435	472	907	52%
	Lib Arts, Sci/Lib Studies					3	2	9	16	49	48	123	127	250	51%
	Pre-Elem/Ec/Kindergn Tchr Ed		1	3	8	10	3	5	12	16	14	110	72	182	40%
	Child Growth/Care/Devel Stds				1	9	9	14	19	21	20	35	93	128	73%
	Humanities/Humanistic Studs						5	8	5	14	8	23	40	63	63%
	Psychology, General	1	1		2			3	3	2	6	41	18	59	31%
	Jhs/Intermed/Mid Sch Tchr Ed				1	3	2		7	3	1	16	17	33	52%
	Indiv/Fam Develop Studs Gen						1	3		6	5	14	15	29	52%
	Cognitive Psych & Psychology								1			5	1	6	17%
	Reading Teacher Education											4	0	4	0%
	Area/Ethnic/Cult Studies Other											3	0	3	0%
	American Studs/Civilization											1	0	1	0%
Fine Arts	Music Teacher Education	7	5	2	11	5	11	7	6	11	13	143	78	221	35%
	Music, General					2	1	1	5	4		33	13	46	28%
	Art, General		1	1	1	2	1	1	1	4	2	14	14	28	50%
	Visual & Performing Arts				1		2	1			1	1	5	6	83%
	Music-General Performance			1			2					1	3	4	75%

Area		90	91	92	93	94	95	96	97	98	99	No Record of Entry	Total Entry	Grand Total	Percent Entry
	Fine/Studio Arts											3	0	3	0%
	Art Teacher Education											2	0	2	0%
	Drama/Theater Arts, Gen											1	0	1	0%
	Music, Other											1	0	1	0%
General	Curriculum & Instruction	5	1	1	15	14	10	15	15	18	4	118	98	216	45%
	Education, General			5	9	4	7	4	5	40	7	110	81	191	42%
	General Studies						2	11	5	21	10	69	49	118	42%
	Teacher Ed, Multiple Levels									2	2	13	4	17	24%
	General Teacher Ed, Other			1	2	2	1	1		1		3	8	11	73%
	Mass Communications							1		1	1	2	3	5	60%
	Communications, General											4	0	4	0%
	Tchr Ed, Acad/Voc Pgms, Oth											2	0	2	0%
	Adult, Continuing Teacher Ed											1	0	1	0%
Health and Physical Education	Phys Ed Teaching & Coaching	6	18	9	24	6	7	4	3	3	2	138	82	220	37%
	Health & Physical Ed, Gen				3	16	11	13	20	16	14	113	93	206	45%
	Sport & Fitness Admin/Mgmt										1	4	1	5	20%
	Health Teacher Education	1				1						1	2	3	67%
	Exer Sci/Phys & Mvmnt Studs											1	0	1	0%
	Health Sys/Health Svcs Admin							1					1	1	100%
Other Professional Staff	Educ Admin & Supervis, Gen	1						1			1	485	3	488	1%
	Counselor Ed Couns/Guid Svcs	1										7	1	8	13%

Area		90	91	92	93	94	95	96	97	98	99	No Record of Entry	Total Entry	Grand Total	Percent Entry
Secondary	Secondary Teacher Education	2	6	11	14	12	19	9	10	12	8	357	103	460	22%
	English Language/Lit, Gen	6	4	7	19	7	19	8	19	15	18	254	122	376	32%
	History, General	1	3	4	4	7	14	11	13	15	16	177	88	265	33%
	Mathematics	6	10	9	8	10	13	15	15	10	7	160	103	263	39%
	Biology, General	3	4	5	9	4	8	7	8	4	3	95	55	150	37%
	English Teacher Education	3	4	1	3	10	3	6	2	2	1	54	35	89	39%
	Social Sciences, General		3	1	6	6	3	1	1	1	1	62	23	85	27%
	Social Studies Teacher Ed	1	3		7	4	3			1		22	19	41	46%
	Mathematics Teacher Ed		1	2	3	3	1	2	1	2	1	22	16	38	42%
	Foreign Languages & Lit Gen	1	1				2	1	2	1	1	19	9	28	32%
	Religious Education	2	2	1	1							22	6	28	21%
	Spanish Language/Literature					1	1	1	2	1	2	18	8	26	31%
	Science Teacher Ed, General	2		4	1							18	7	25	28%
	Chemistry, General				1		2	2	1	1	2	12	9	21	43%
	Social Sci & History, Other					1			2	2	1	13	6	19	32%
	French Language/Literature				1		1	2		2	1	10	7	17	41%
	Religion/Religious Studies											16	0	16	0%
	Bible/Biblical Studies									1	2	12	3	15	20%
	Biological & Physical Sci							1				9	1	10	10%
	Political Science, General					1				1		8	2	10	20%
	History Teacher Education								1	1		7	2	9	22%
	Theology/Theological Studies											9	0	9	0%
	Conserv & Renew Nat Res, Oth								5			3	5	8	63%
	Biology Teacher Education						1			1	1	4	3	7	43%
	Physics, General											6	0	6	0%
	Foreign Language Teacher Ed				2							3	2	5	40%
	Applied Mathematics, General					1		1		1		1	3	4	75%
	French Language Teacher Ed											4	0	4	0%

Area		90	91	92	93	94	95	96	97	98	99	No Record of Entry	Total Entry	Grand Total	Percent Entry
Secondary	Sociology				1		1					1	2	3	67%
	Chemistry Teacher Education											2	0	2	0%
	Earth & Planetary Sciences											2	0	2	0%
	German Language/Literature											2	0	2	0%
	Admin Asst/Sec Sci, Gen											1	0	1	0%
	Classics/Classical Lang/Lit											1	0	1	0%
	Economics, General											1	0	1	0%
	Greek Lang/Lit (Anc & Med)											1	0	1	0%
	Latin American Studies											1	0	1	0%
	Physical Sciences, General											1	0	1	0%
	Physics Teacher Education											1	0	1	0%
	Physics, Other			1									1	1	100%
Special Education	Special Education, General	4	7	4	20	14	8	19	24	30	18	188	148	336	44%
	Speech-Lang Path & Audiologist				1	4	3	2		1		2	11	13	85%
	Speech Teacher Education											1	0	1	0%
Vocational Education	Business Teacher Ed (Voc)				1							15	1	16	6%
	Business, General						2		3		3	8	8	16	50%
	Business Admin & Mgmt, Gen									2	2	7	4	11	36%
	Home Ec Teacher Ed (Voc)			2	1					1	1	4	5	9	56%
	Business/Managerial Economic							1		1		2	2	4	50%
	Computer & Info Science, Gen											2	0	2	0%
	Computer & Info Science, Oth	1										1	1	2	50%
	Elect, Electron & Comm Eng									1		1	1	2	50%
	Accounting									1			1	1	100%
	Computer Science											1	0	1	0%
	Engineering Science											1	0	1	0%
	Grand Total	155	206	241	421	348	345	339	392	510	395	5236	3352	8588	39%

Table 49: All Levels, Private IHE majors, 1st licensure recipients, Entry by Position: 1990- 99

Area		Early Childhood Education	Kindergarten Teachers	Elementary Teachers	Middle School Teachers	Jr. High School Teachers	HS Business	HS Foreign Language	HS Language Arts	HS Mathematics	HS Other	HS Science	HS Social Studies	HS Vocational Ed.	Special Education	Librarians	Guidance Counselors	Other Professional Staff	Grand Total
Early Childhood and Elementary Education	Elementary Teacher Education	4	146	602	209	88	1		2		13		2	3	103	5	2	4	1184
	Multi/Interdisc Studs, Oth	4	65	220	99	55					11				29	2	1	3	489
	Lib Arts, Sci/Lib Studies	1	18	53	28	25					1				3	1		2	132
	Child Growth/Care/Devel Stds		17	39	14	4									16			3	93
	Pre-Elem/Ec/Kinderng Tchr Ed	4	17	33	13	4		1			1				2				75
	Humanities/Humanistic Studs		7	24	3	4					1			2	4	1			46
	Jhs/Intermed/Mid Sch Tchr Ed		1	10	4	2								1					18
	Psychology, General		2	8	3	2			1		1						1		18
	Indiv/Fam Develop Studs Gen		8	8															16
	Cognitive Psych & Psycholing				1														1
Fine Arts	Music Teacher Education			66		4					9			2			1		82
	Music, General			15							1								16
	Art, General			9	2	1					3								15
	Visual & Performing Arts			2							3								5
	Music -General Performance			4															4
General	Curriculum & Instruction	1	2	39	24	12	1	1	1	2	6	3	2	1	6	1			102
	Education, General		4	21	13	8	1		3	3	10	3	3		7		6		82
	General Studies		9	24	11	6								1	1				52
	General Teacher Ed, Other			2	1						2				2	1			8
	Teacher Ed, Multiple Levels		1	1	1										1				4
	Mass Communications				1						1			1					3

Area		Early Childhood Education	Kindergarten Teachers	Elementary Teachers	Middle School Teachers	Jr. High School Teachers	HS Business	HS Foreign Language	HS Language Arts	HS Mathematics	HS Other	HS Science	HS Social Studies	HS Vocational Ed.	Special Education	Librarians	Guidance Counselors	Other Professional Staff	Grand Total
Health and Physical Education	Health & Physical Ed, Gen		3	49	5	12			1		24	3		1	1	1			100
	Phys Ed Teaching & Coaching			37	5	13	1		1	1	22	2	1	3					86
	Health Teacher Education			1		1													2
	Health Sys/Health Svcs Admin			1															1
	Sport & Fitness Admin/Mgmt			1															1
Other Professional Staff	Educ Admin & Supervis, Gen					2									1				3
	Counselor Ed Couns/Guid Svcs														1				1
Secondary	English Language/Lit, Gen			4	4	29	1	4	37	1	42			2	5	2		1	132
	Secondary Teacher Education			11		25	1	5	5	12	33	4	8	1				1	106
	Mathematics			1	3	20				48	25	2	1	1	4				105
	History, General			10	6	16			1	1	21		24	5	6	1			91
	Biology, General			2	4	9				1	11	26		1	2		1		57
	English Teacher Education				1	10			12		11			2	1				37
	Social Sciences, General	1	1	3	1	5					2		8		4				25
	Social Studies Teacher Ed			1	2	6					3		5		1	1			19
	Mathematics Teacher Ed				1	3				6	8								18
	Chemistry, General					1					4	4							9
	Foreign Languages & Lit Gen							6			3								9
	Science Teacher Ed, General									1	5	2							8
	Spanish Language/Literature					1		5			1				1				8
	French Language/Literature			1		1		2			2				1				7
	Religious Education			6		1													7
	Social Sci & History, Other					2							4						6
	Conserv & Renew Nat Res, Oth			1	2						2								5

Area		Early Childhood Education	Kindergarten Teachers	Elementary Teachers	Middle School Teachers	Jr. High School Teachers	HS Business	HS Foreign Language	HS Language Arts	HS Mathematics	HS Other	HS Science	HS Social Studies	HS Vocational Ed.	Special Education	Librarians	Guidance Counselors	Other Professional Staff	Grand Total
Secondary	Bible/Biblical Studies		2	2						1									4
	Applied Mathematics, General					2				1									3
	Biology Teacher Education											3							3
	Foreign Language Teacher Ed							1			1								2
	History Teacher Education										2								2
	Political Science, General				1						1								2
	Sociology				1					1									2
	Biological & Physical Sci					1													1
	Physics, Other										1								1
Special Education	Special Education, General	3	1	10	3	3					1				126			6	153
	Speech-Lang Path & Audiologist														4			7	11
Vocational Education	Business, General			2		2	3				1				1				9
	Home Ec Teacher Ed (Voc)										2			3					5
	Business Admin & Mgmt, Gen						1				1			2					4
	Business Teacher Ed (Voc)			1			1			1	1								4
	Business/Managerial Economic				1						1								2
	Accounting						1												1
	Computer & Info Science, Oth					1													1
	Elect, Electron & Comm Eng					1													1
	Grand Total	18	304	1324	467	382	12	25	64	79	294	52	58	31	334	16	12	27	3499

☞ Note: The columns add to 100% ---so each cells shows the participation by major to a particular position. For example for “Early Childhood Education” majors in Elementary Teacher Education contribute 22 percent to entrants, Special Education contributes 17 percent, etc.

☞ Note: Special education as a position draws 38% of its entrants from the special education major.

☞ Note: Elementary Teacher Education majors contribute substantially to early childhood education, kindergarten teachers, elementary teachers, middle school teachers, junior high school teachers, and librarians.

Table 50: Percent of Private IHE Majors, 1st time licensure recipients, Entry by Position: 1990 to 1999

Area	Major	Early Childhood Education	Kindergarten Teachers	Elementary Teachers	Middle School Teachers	Jr. High School Teachers	HS Business	HS Foreign Language	HS Language Arts	HS Mathematics	HS Other	HS Science	HS Social Studies	HS Vocational Ed.	Special Education	Librarians	Guidance Counselors	Other Professional Staff	Grand Total	Percent of Total
Early Childhood and Elementary Education	Elementary Teacher Education	22%	48%	45%	45%	23%	8%		3%		4%		3%	10%	31%	31%	17%	15%	1184	34%
	Multi/Interdisc Studs, Oth	22%	21%	17%	21%	14%					4%				9%	13%	8%	11%	489	14%
	Lib Arts, Sci/Lib Studies	6%	6%	4%	6%	7%					0%				1%	6%		7%	132	4%
	Child Growth/Care/Devel Stds		6%	3%	3%	1%									5%			11%	93	3%
	Pre-Elem/Ec/Kindergn Tchr Ed	22%	6%	2%	3%	1%		4%			0%				1%				75	2%
	Humanities/Humanistic Studs		2%	2%	1%	1%					0%			6%	1%	6%			46	1%
	Jhs/Intermed/Mid Sch Tchr Ed		0%	1%	1%	1%									0%				18	1%
	Psychology, General		1%	1%	1%	1%			2%		0%						8%		18	1%
	Indiv/Fam Develop Studs Gen		3%	1%															16	0%
	Cognitive Psych & Psycholing				0%														1	0%
Fine Arts	Music Teacher Education			5%		1%					3%			6%			8%		82	2%
	Music, General			1%							0%								16	0%
	Art, General			1%	0%	0%					1%								15	0%
	Visual & Performing Arts			0%							1%								5	0%
	Music -General Performance			0%															4	0%


Area	Major	Early Childhood Education	Kindergarten Teachers	Elementary Teachers	Middle School Teachers	Jr. High School Teachers	HS Business	HS Foreign Language	HS Language Arts	HS Mathematics	HS Other	HS Science	HS Social Studies	HS Vocational Ed.	Special Education	Librarians	Guidance Counselors	Other Professional Staff	Grand Total	Percent of Total
General	Curriculum & Instruction	6%	1%	3%	5%	3%	8%	4%	2%	3%	2%	6%	3%	3%	2%	6%			102	3%
	Education, General		1%	2%	3%	2%	8%		5%	4%	3%	6%	5%		2%		50%		82	2%
	General Studies		3%	2%	2%	2%								3%	0%				52	1%
	General Teacher Ed, Other			0%	0%						1%				1%	6%			8	0%
	Teacher Ed, Multiple Levels		0%	0%	0%										0%				4	0%
	Mass Communications				0%						0%			3%					3	0%
Health and Physical Education	Health & Physical Ed, Gen		1%	4%	1%	3%			2%		8%	6%		3%	0%	6%			100	3%
	Phys Ed Teaching & Coaching			3%	1%	3%	8%		2%	1%	7%	4%	2%	10%					86	2%
	Health Teacher Education			0%		0%													2	0%
	Health Sys/Health Svcs Admin			0%															1	0%
	Sport & Fitness Admin/Mgmt			0%															1	0%
Other Professional Staff	Educ Admin & Supervis, Gen					1%									0%				3	0%
	Counselor Ed Couns/Guid Svcs														0%				1	0%
Secondary	English Language/Lit, Gen			0%	1%	8%	8%	16%	58%	1%	14%			6%	1%	13%		4%	132	4%
	Secondary Teacher Education			1%		7%	8%	20%	8%	15%	11%	8%	14%	3%				4%	106	3%
	Mathematics			0%	1%	5%				61%	9%	4%	2%	3%	1%				105	3%
	History, General			1%	1%	4%			2%	1%	7%		41%	16%	2%	6%			91	3%
	Biology, General			0%	1%	2%				1%	4%	50%		3%	1%		8%		57	2%
	English Teacher Education				0%	3%			19%		4%			6%	0%				37	1%
	Social Sciences, General	6%	0%	0%	0%	1%					1%		14%		1%				25	1%
	Social Studies Teacher Ed			0%	0%	2%					1%		9%		0%	6%			19	1%

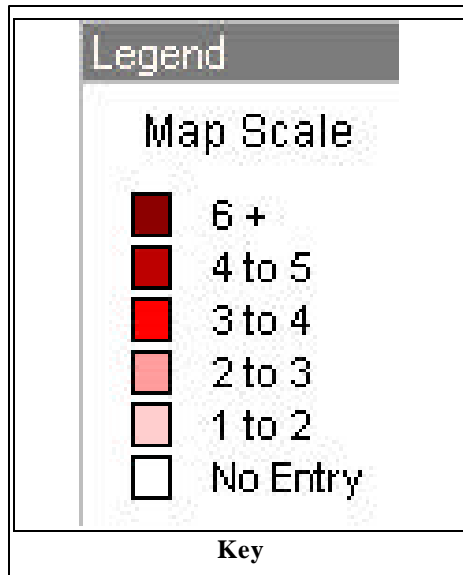
Area	Major	Early Childhood Education	Kindergarten Teachers	Elementary Teachers	Middle School Teachers	Jr. High School Teachers	HS Business	HS Foreign Language	HS Language Arts	HS Mathematics	HS Other	HS Science	HS Social Studies	HS Vocational Ed.	Special Education	Librarians	Guidance Counselors	Other Professional Staff	Grand Total	Percent of Total
Special Education	Mathematics Teacher Ed				0%	1%				8%	3%								18	1%
	Chemistry, General					0%					1%	8%							9	0%
	Foreign Languages & Lit Gen							24%			1%								9	0%
	Science Teacher Ed, General									1%	2%	4%							8	0%
	Spanish Language/Literature					0%		20%			0%				0%				8	0%
	French Language/Literature			0%		0%		8%			1%				0%				7	0%
	Religious Education			0%		0%													7	0%
	Social Sci & History, Other					1%							7%						6	0%
	Conserv & Renew Nat Res, Oth			0%	0%						1%								5	0%
	Bible/Biblical Studies		1%	0%															4	0%
	Applied Mathematics, General					1%				1%									3	0%
	Biology Teacher Education											6%							3	0%
	Foreign Language Teacher Ed							4%			0%								2	0%
	History Teacher Education										1%								2	0%
	Political Science, General				0%						0%								2	0%
	Sociology				0%					1%									2	0%
	Biological & Physical Sci					0%													1	0%
	Physics, Other										0%								1	0%
	Special Education, General	17%	0%	1%	1%	1%					0%				38%			22%	153	4%
	Speech-Lang Path & Audiologist														1%			26%	11	0%

Area	Major	Early Childhood Education	Kindergarten Teachers	Elementary Teachers	Middle School Teachers	Jr. High School Teachers	HS Business	HS Foreign Language	HS Language Arts	HS Mathematics	HS Other	HS Science	HS Social Studies	HS Vocational Ed.	Special Education	Librarians	Guidance Counselors	Other Professional Staff	Grand Total	Percent of Total
Vocational Education	Business, General			0%		1%	25%				0%				0%				9	0%
	Home Ec Teacher Ed (Voc)										1%			10%					5	0%
	Business Admin & Mgmt, Gen						8%				0%			6%					4	0%
	Business Teacher Ed (Voc)			0%			8%			1%	0%								4	0%
	Business/Managerial Economic				0%						0%								2	0%
	Accounting						8%												1	0%
	Computer & Info Science, Oth					0%													1	0%
	Elect, Electron & Comm Eng					0%													1	0%

Geographic Analysis of Entry from Tennessee IHEs

The IHEs over the state of Tennessee play an important function in creating supply. As the following maps will show, supply is quite regional.

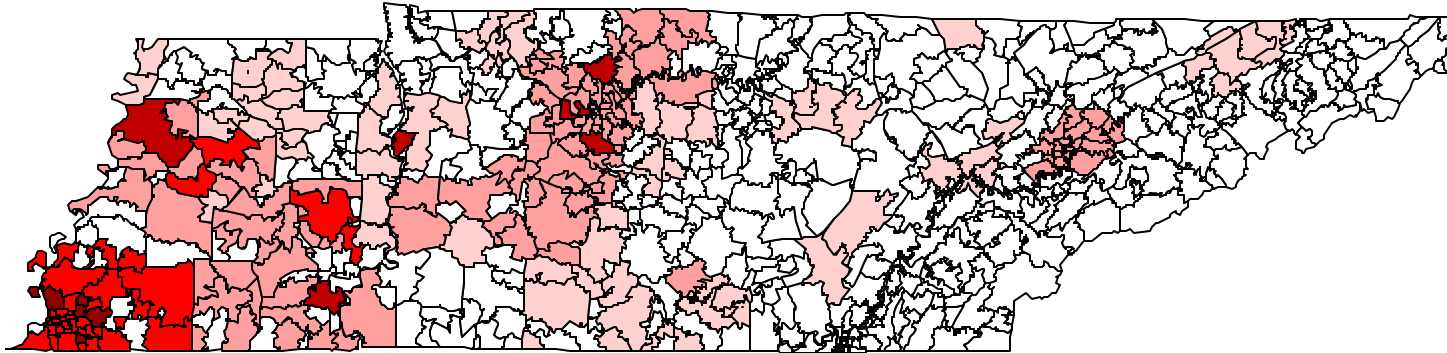
 Note: The maps on the following pages show the clear regional supply of most of the public schools. The maps show where those who have attained licensure end up enter work in the Tennessee educator workforce.



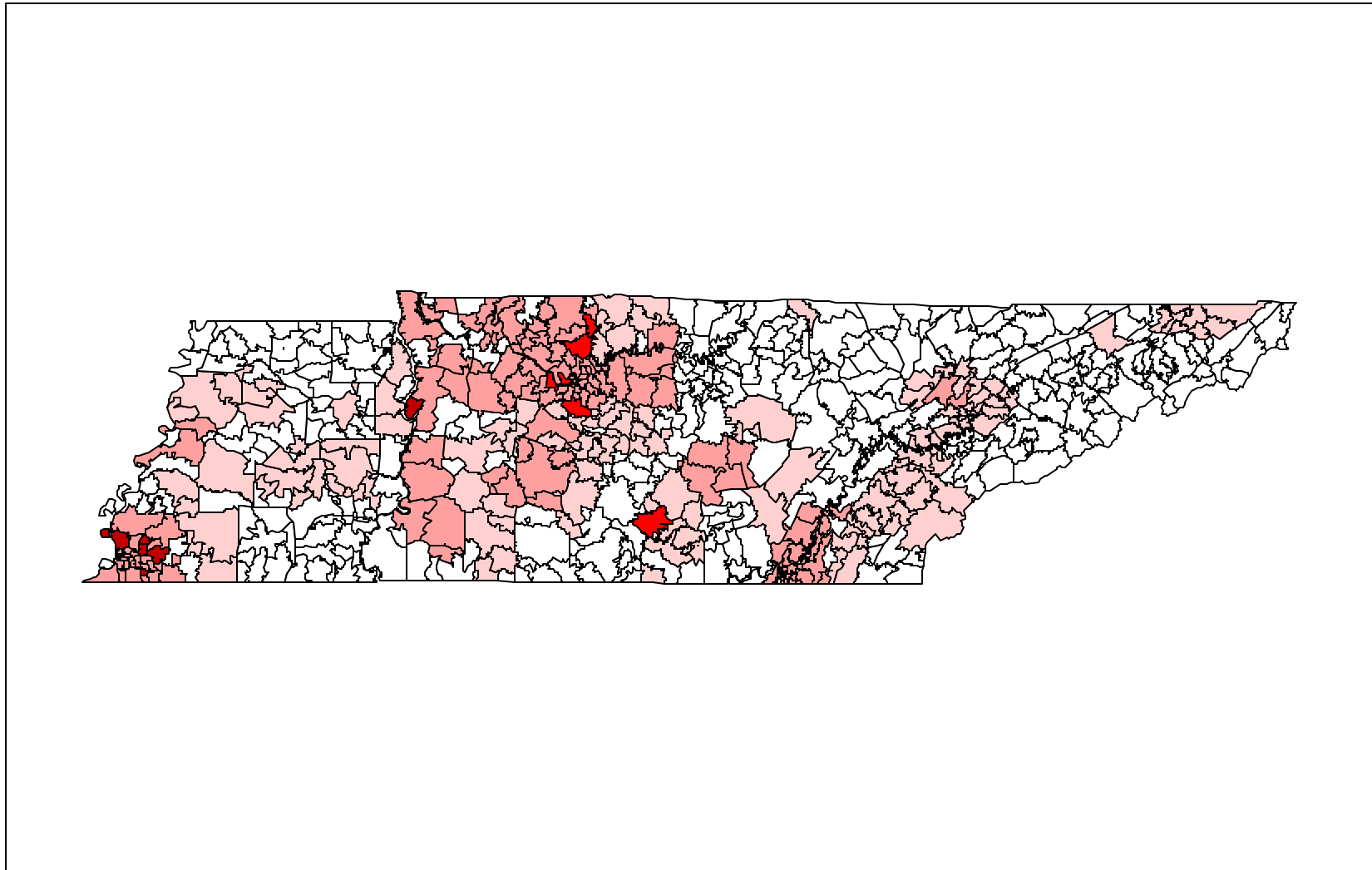
The key on the left is for the following maps. Each color indicates the number of first time licensure recipients who have entered a district from 1990 to 1999 from a particular college or university. What follows are 39 maps for the Tennessee colleges and universities that have a shown entrants from 1993 to 1997.

The darkest color red indicates that a particular IHE has sent 6 or more educators who were first time licensure recipients to a particular district from 1990 to 1999. The next color indicates that 4 to 5 educators have been sent to a particular district, etc.

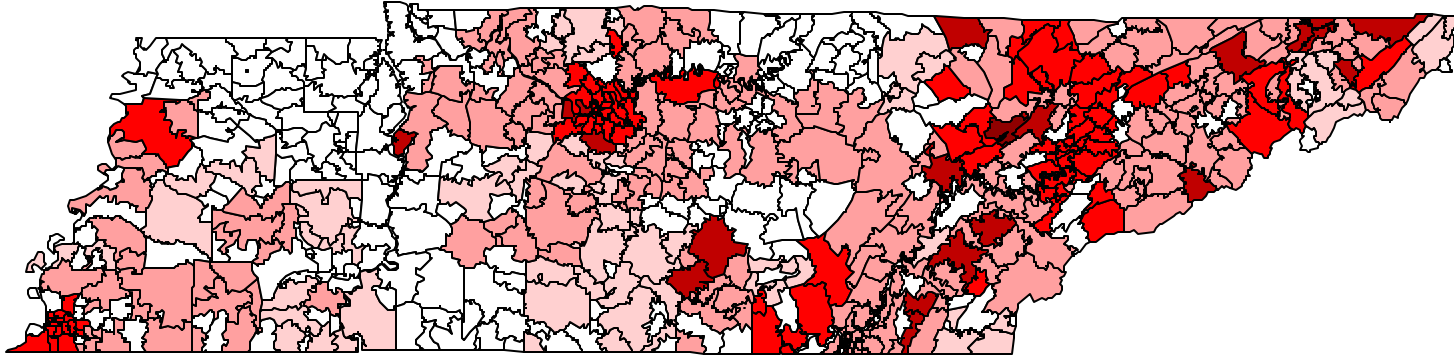
Map 1: University of Memphis



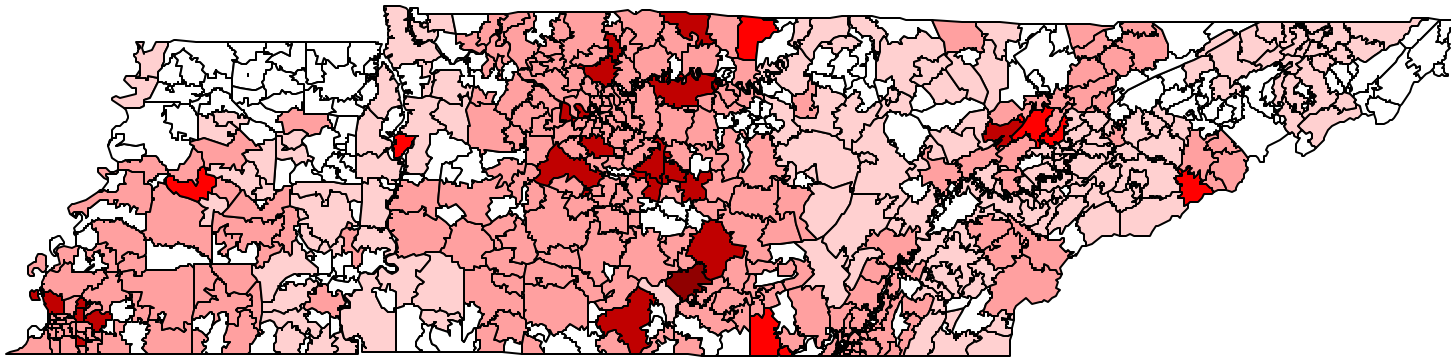
Map 2: Austin Peay State University



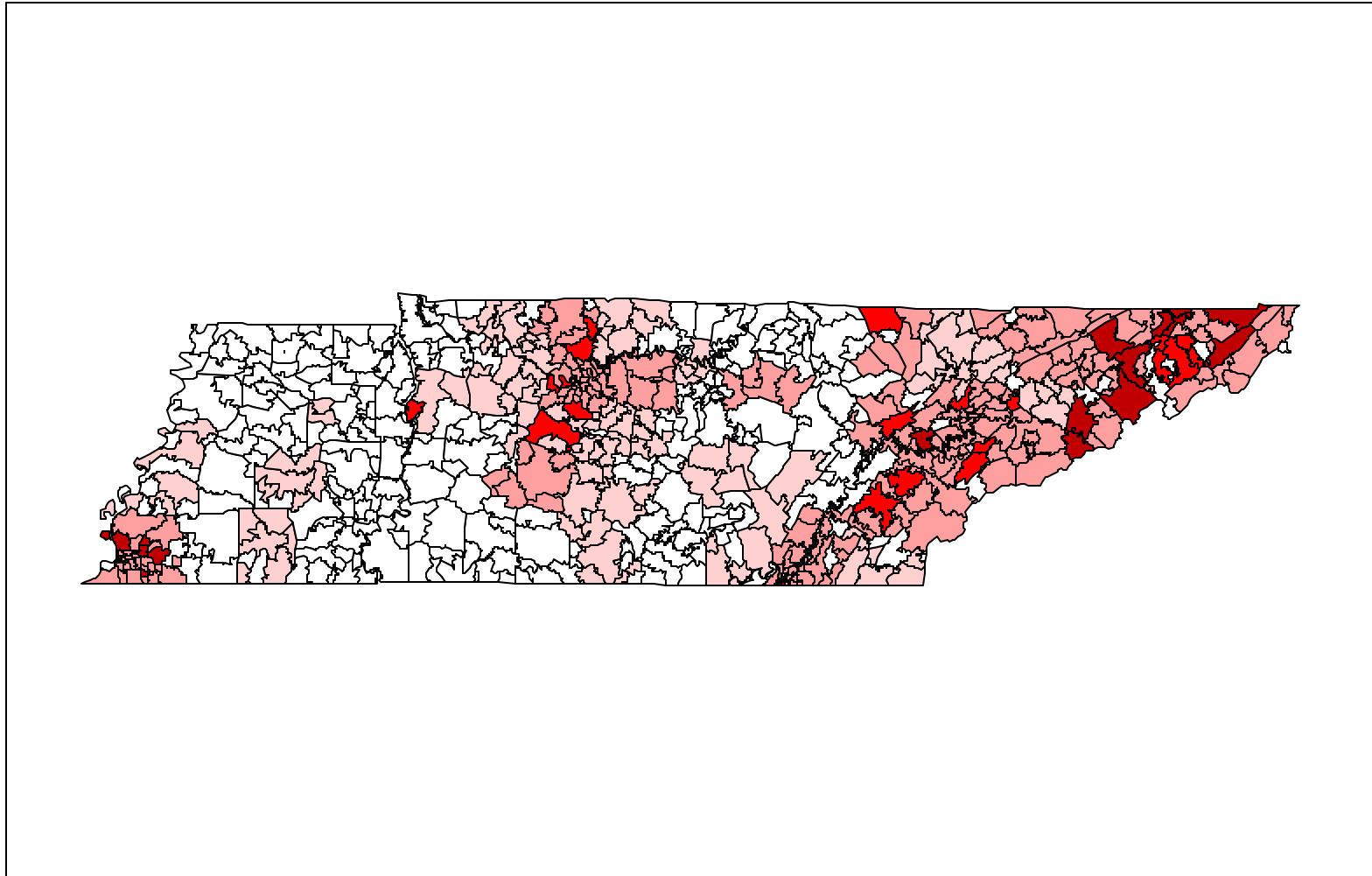
Map 3: East Tennessee State University



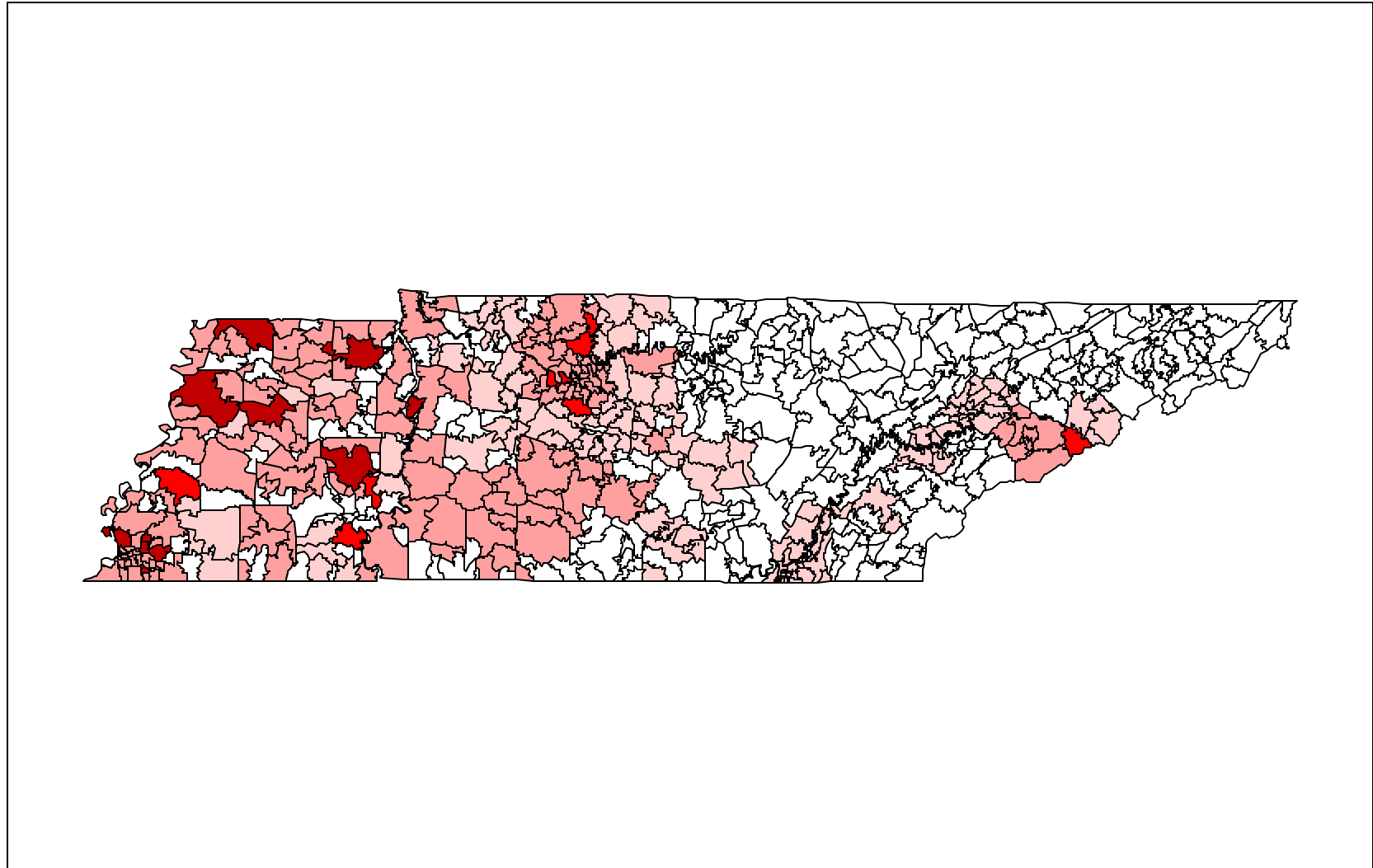
Map 4: Middle Tennessee State University



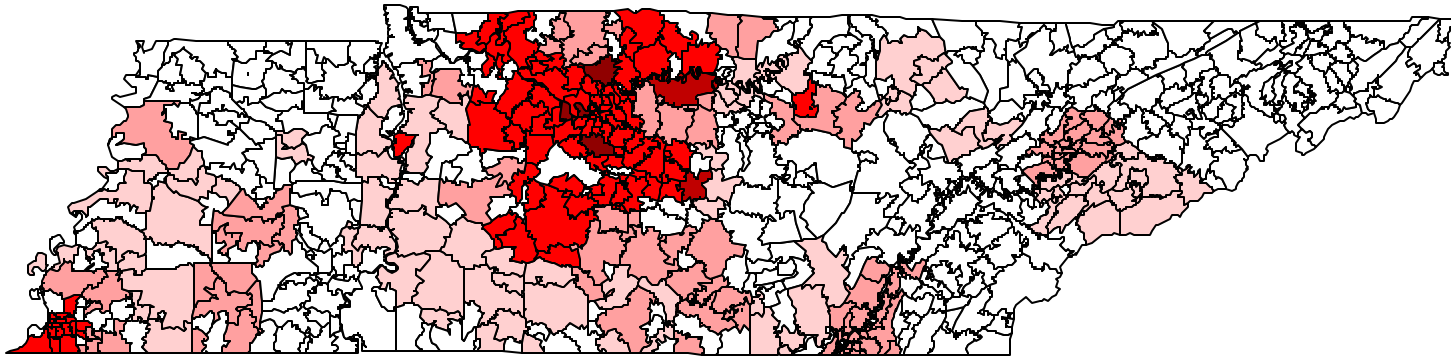
Map 5: University of Tennessee at Knoxville



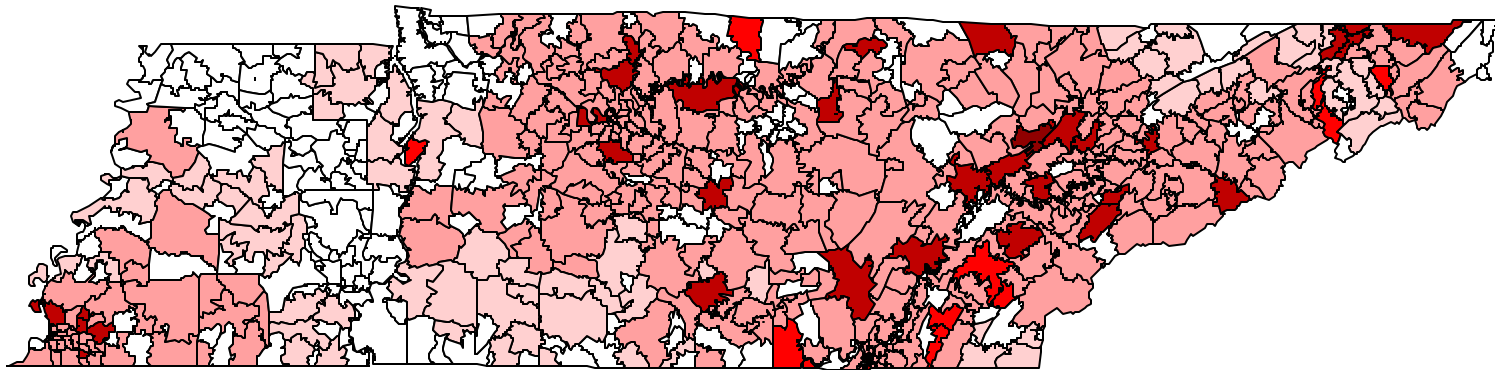
Map 6: University of Tennessee at Martin



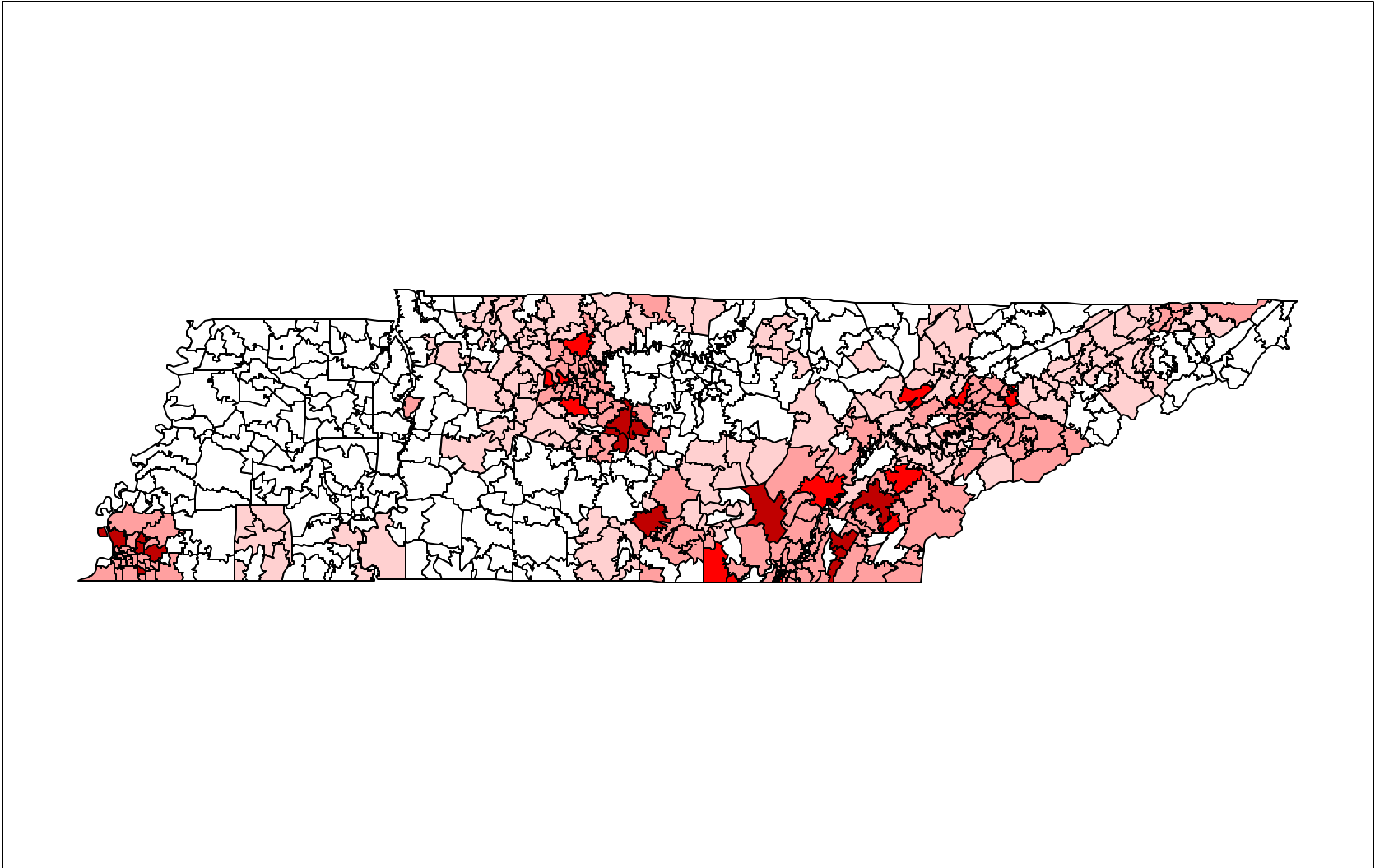
Map 7: Tennessee State University



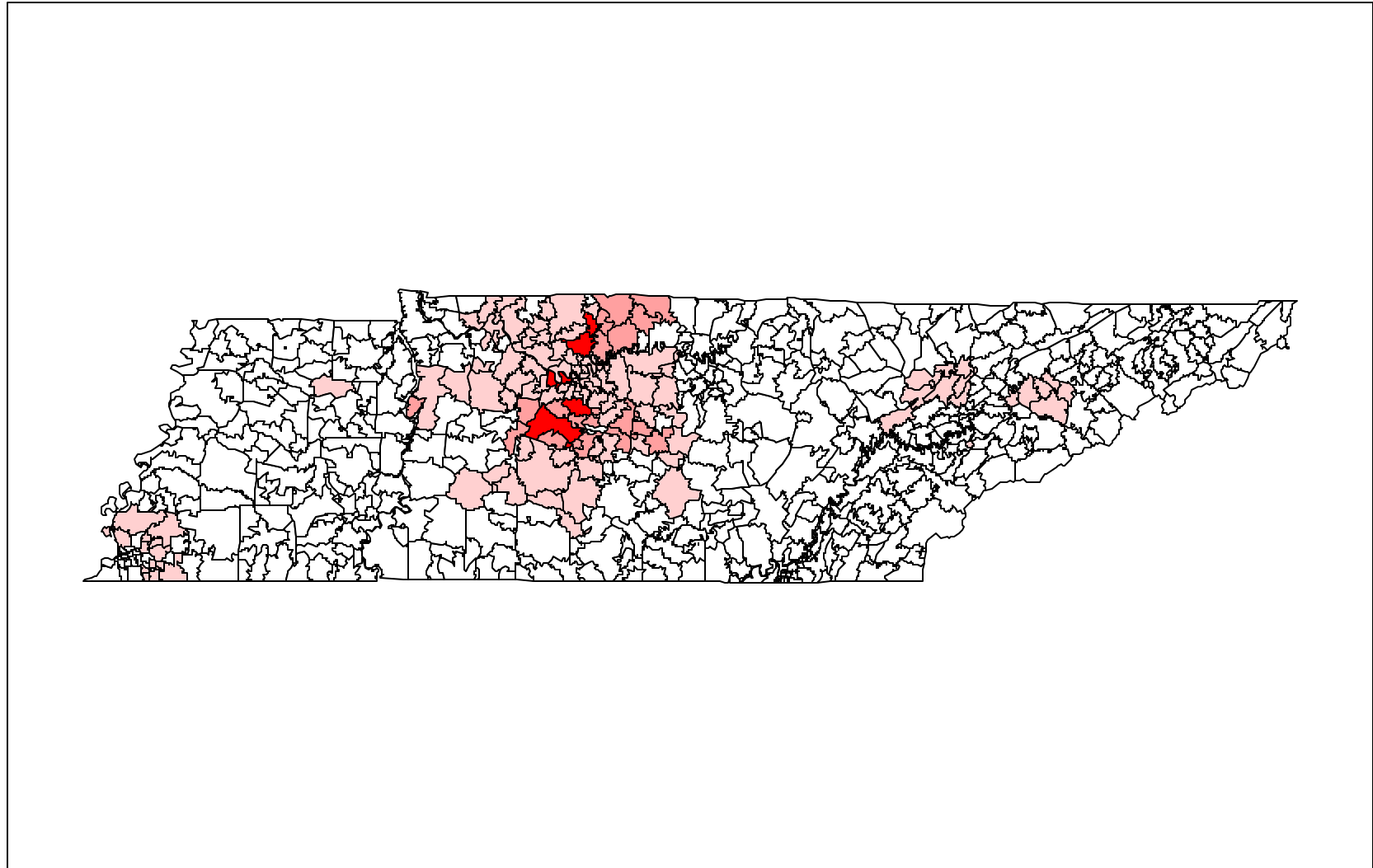
Map 8: Tennessee Technological University



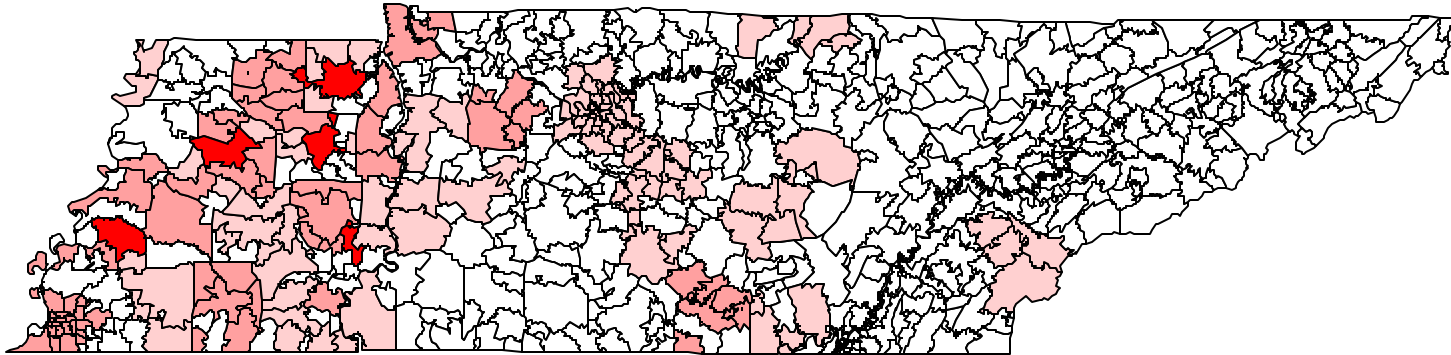
Map 9: University of Tennessee at Chattanooga



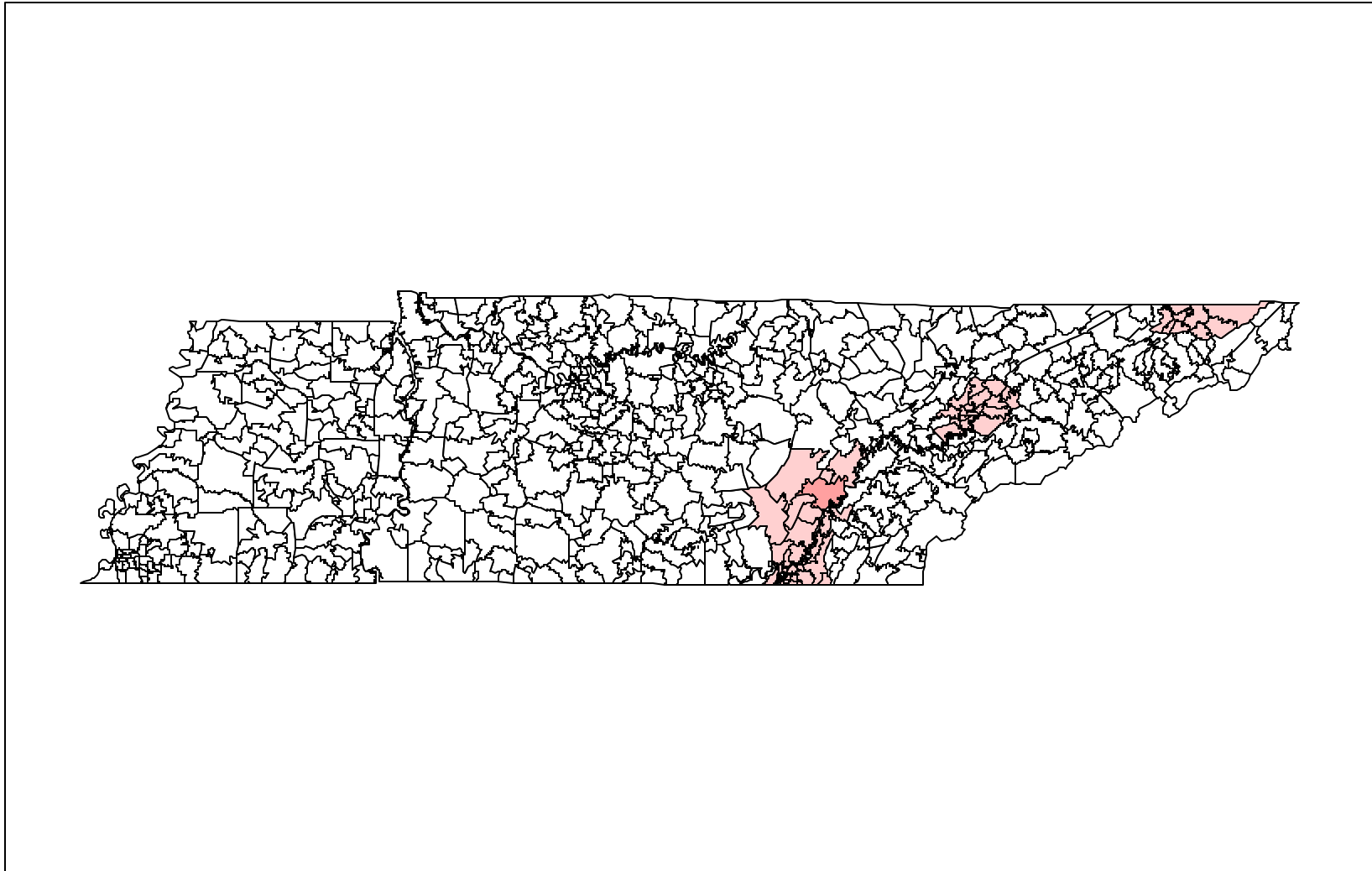
Map 10: Belmont College



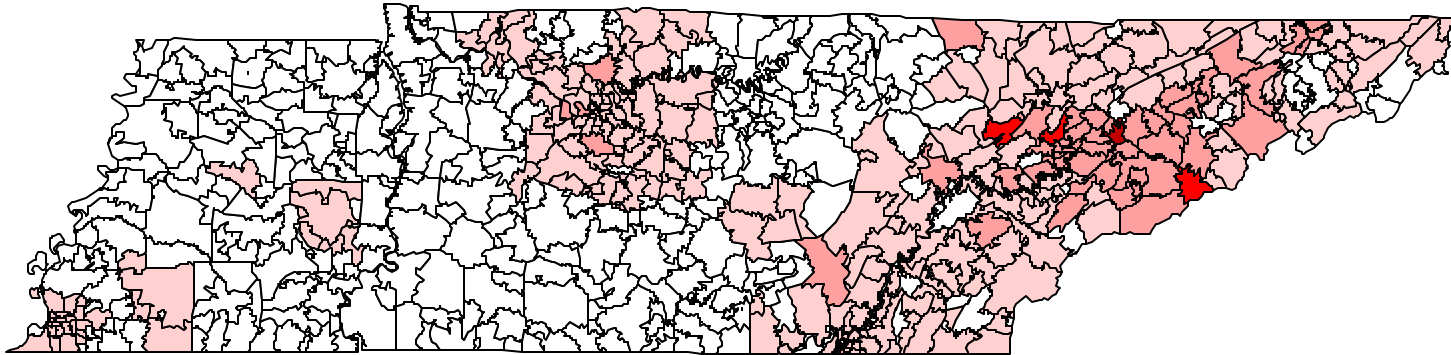
Map 11: Bethel College



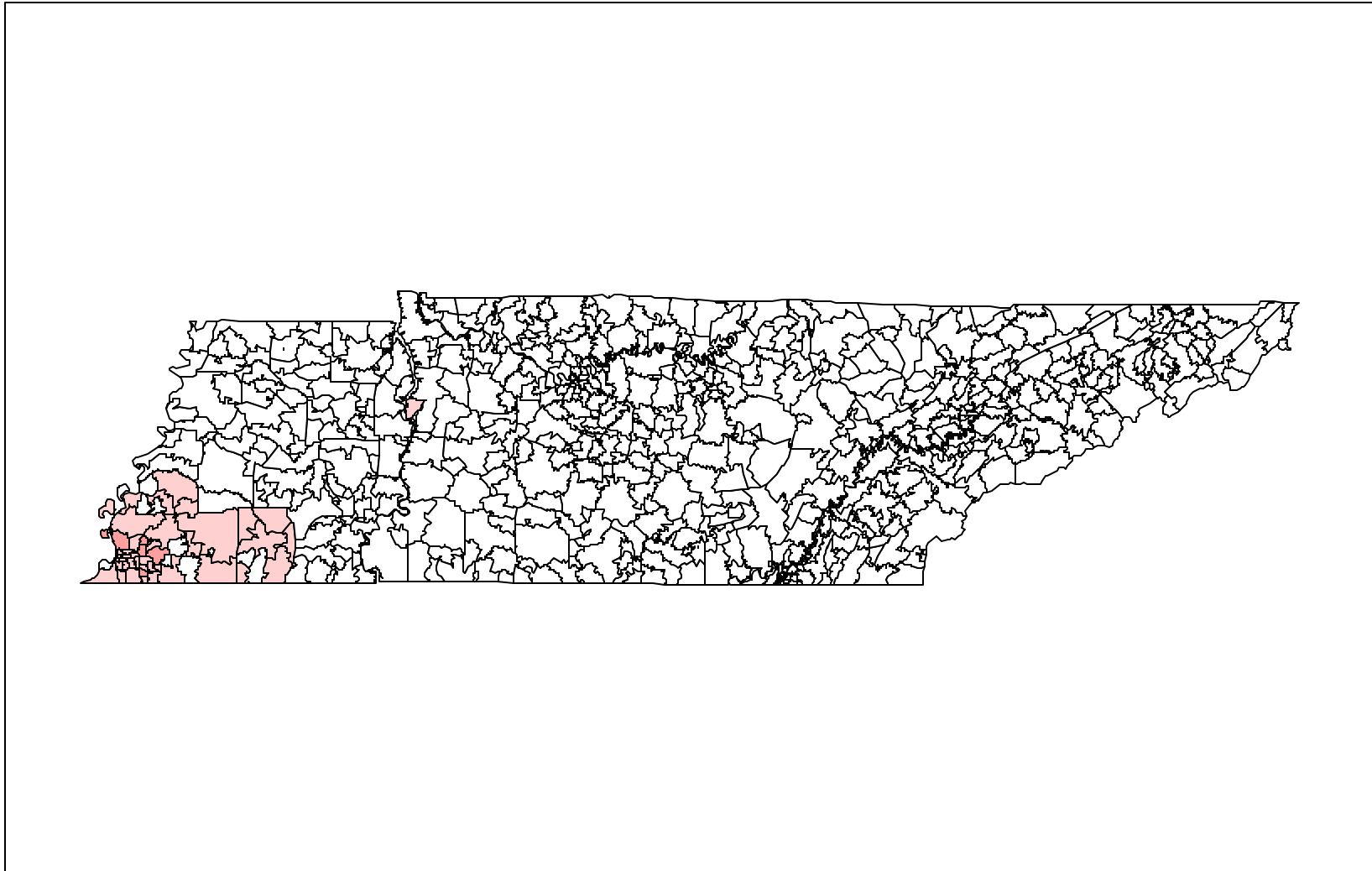
Map 12: Bryan College



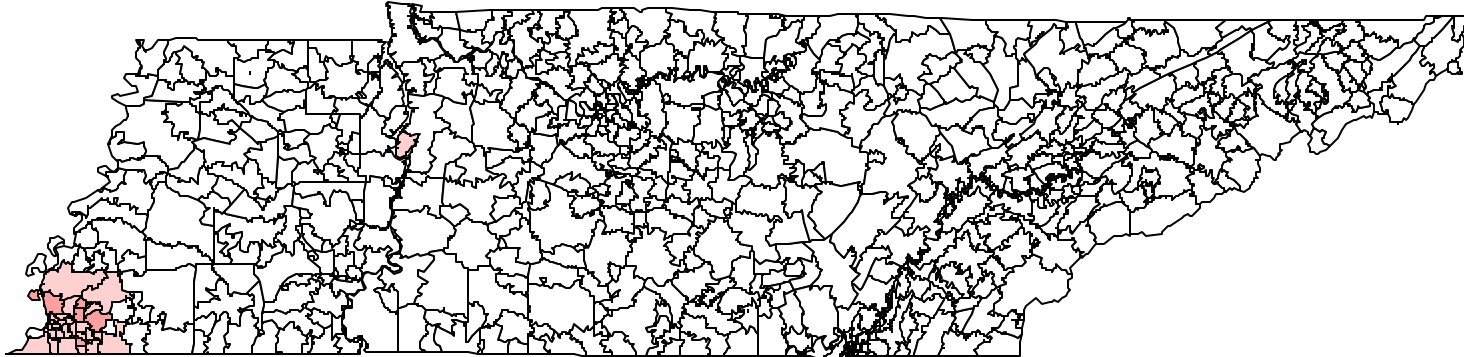
Map 13: Carson-Newman Collage



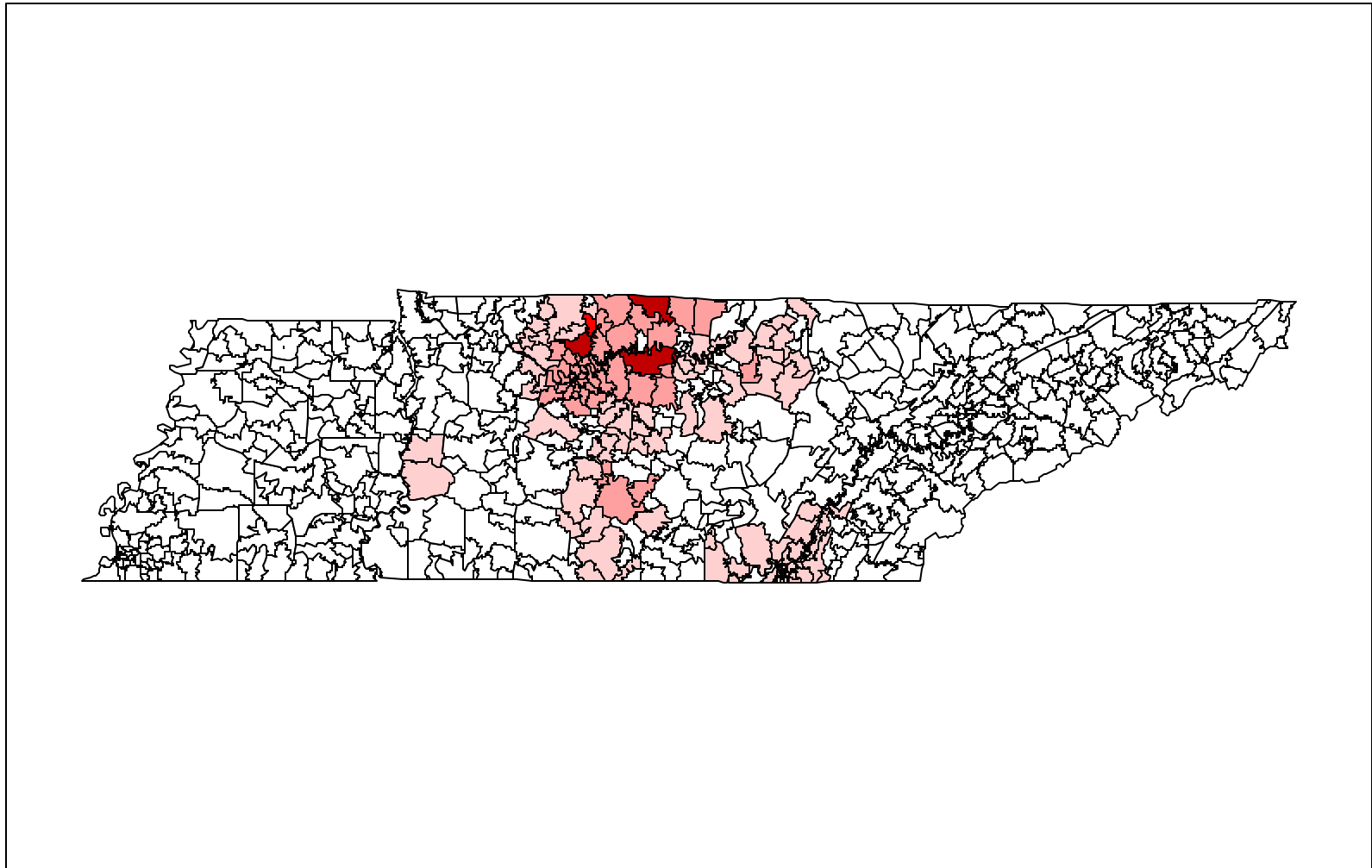
Map 14: Christian Brothers University



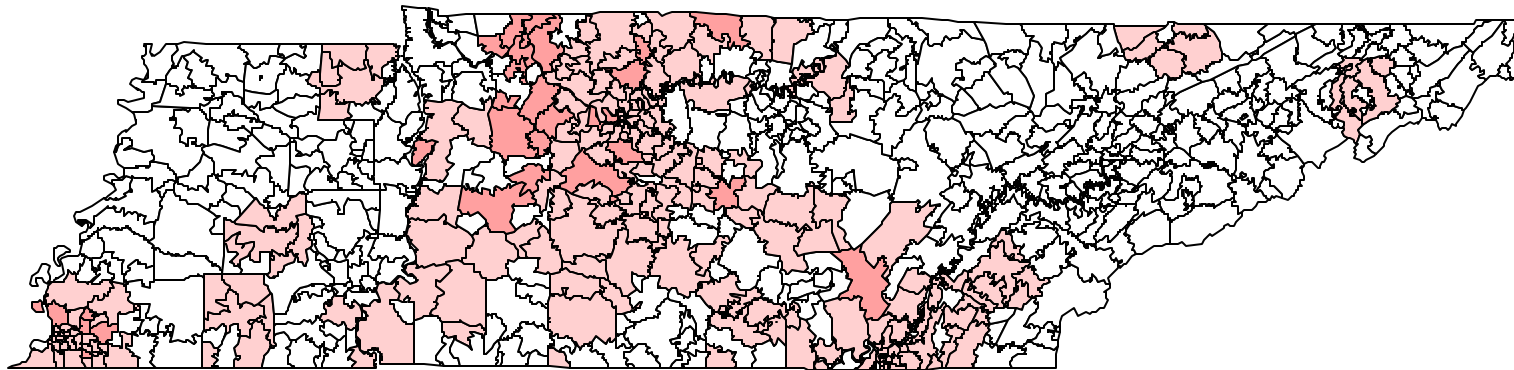
Map 15: Crichton College



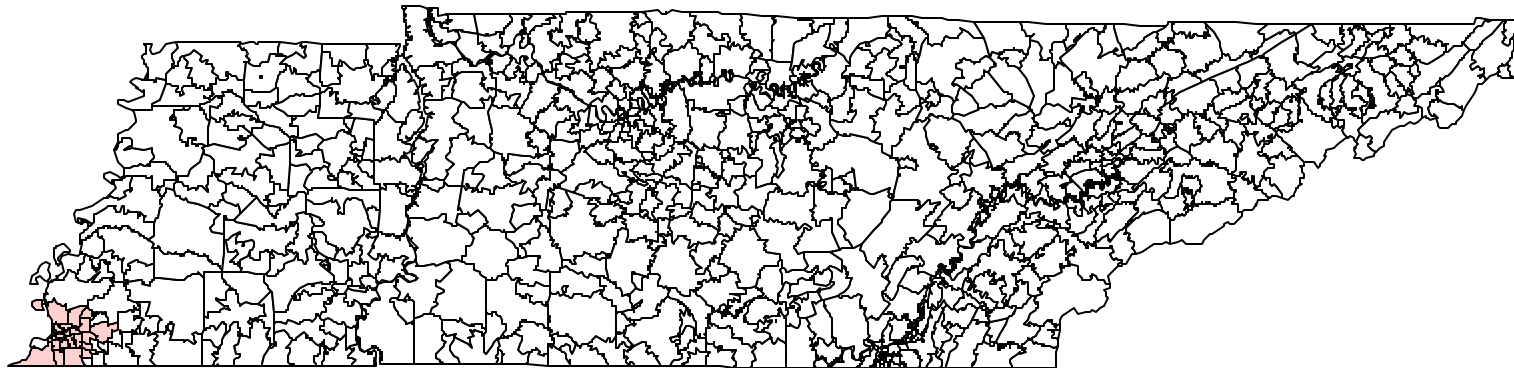
Map 16: Cumberland University



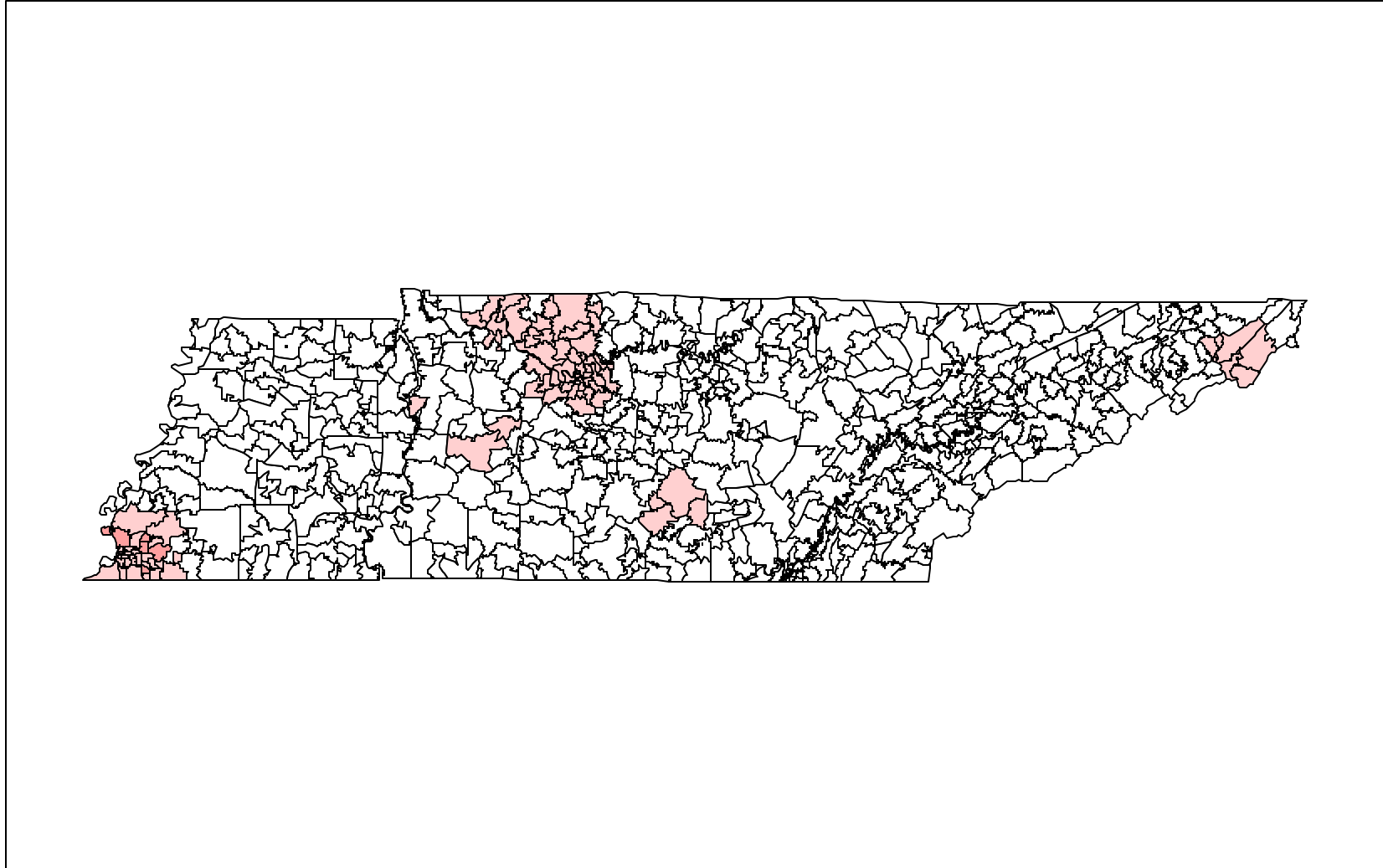
Map 17: David Lipscomb University



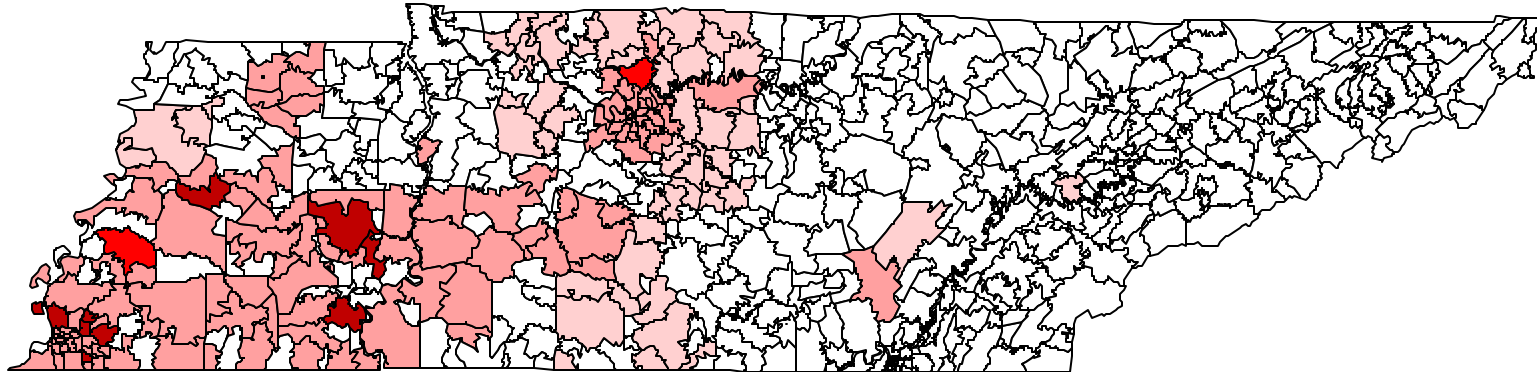
Map 18: Fisk University



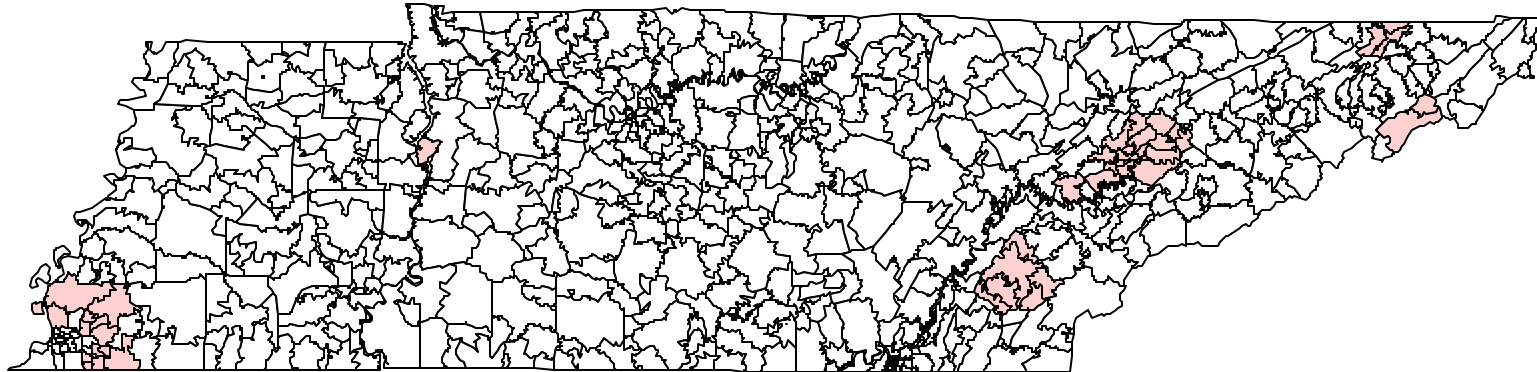
Map 19: Free-Will Baptist College



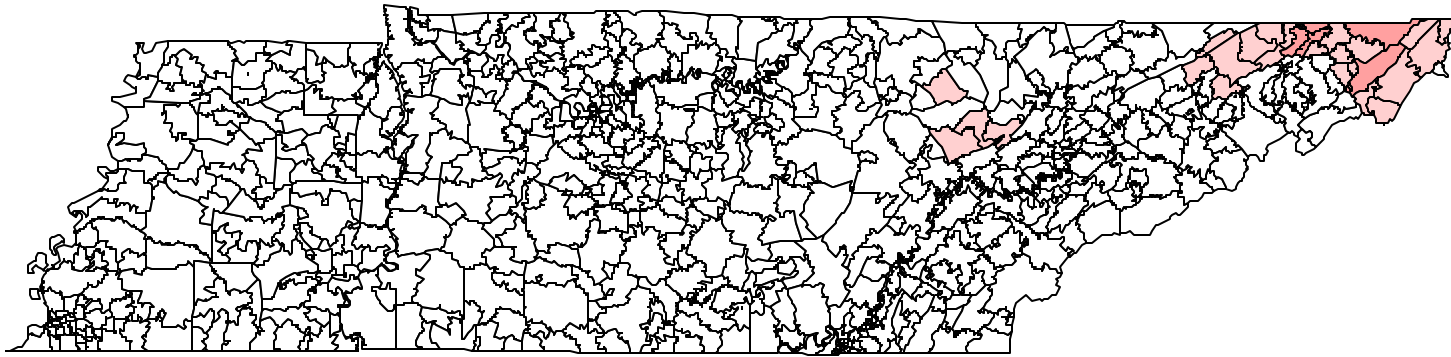
Map 20: Freed-Hardeman University



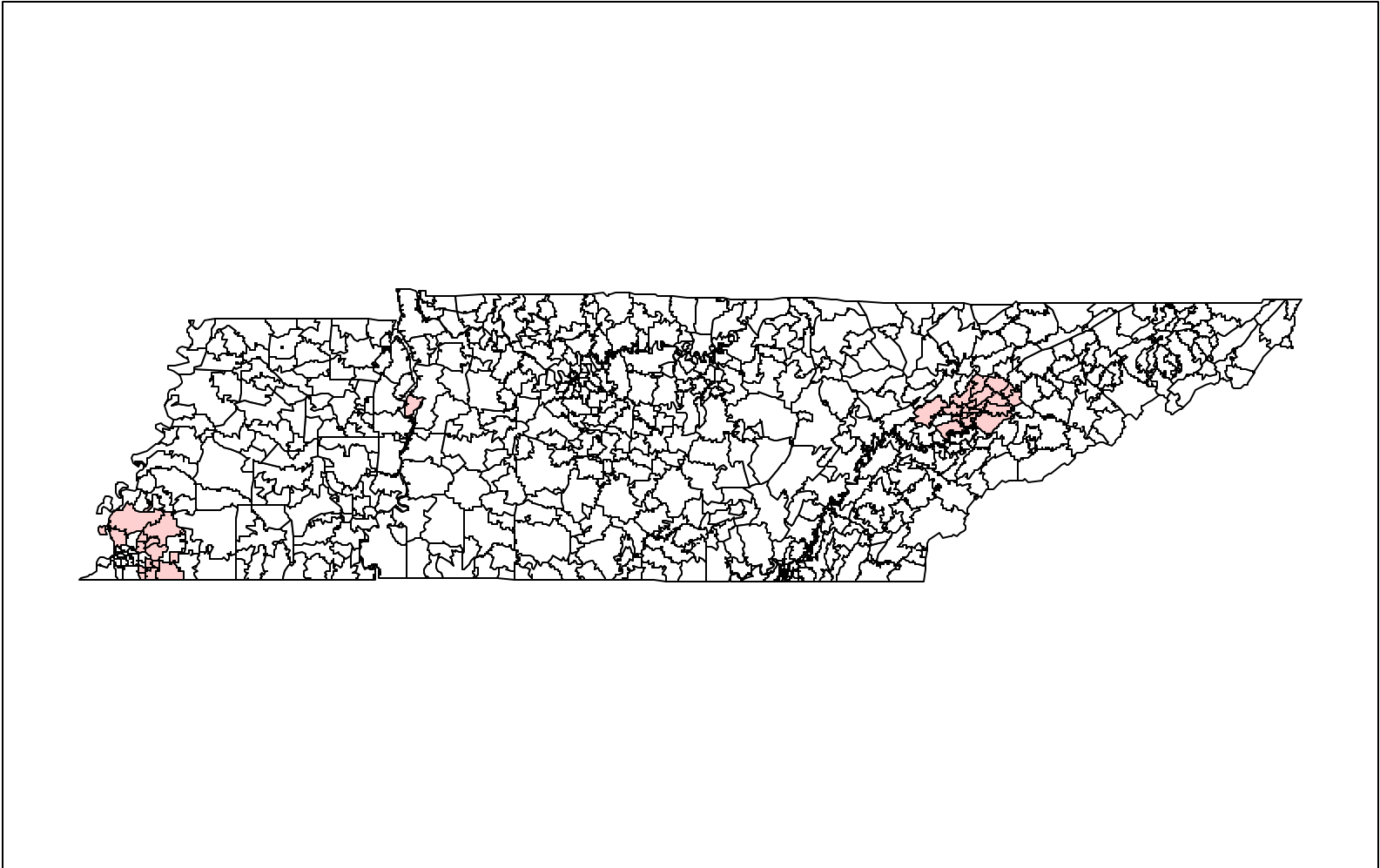
Map 21: Johnson Bible College



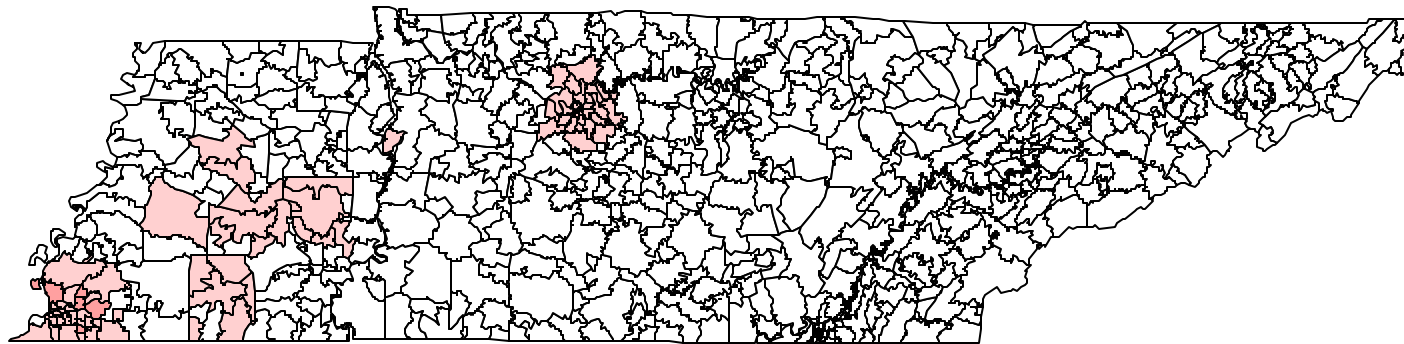
Map 22: **King College**



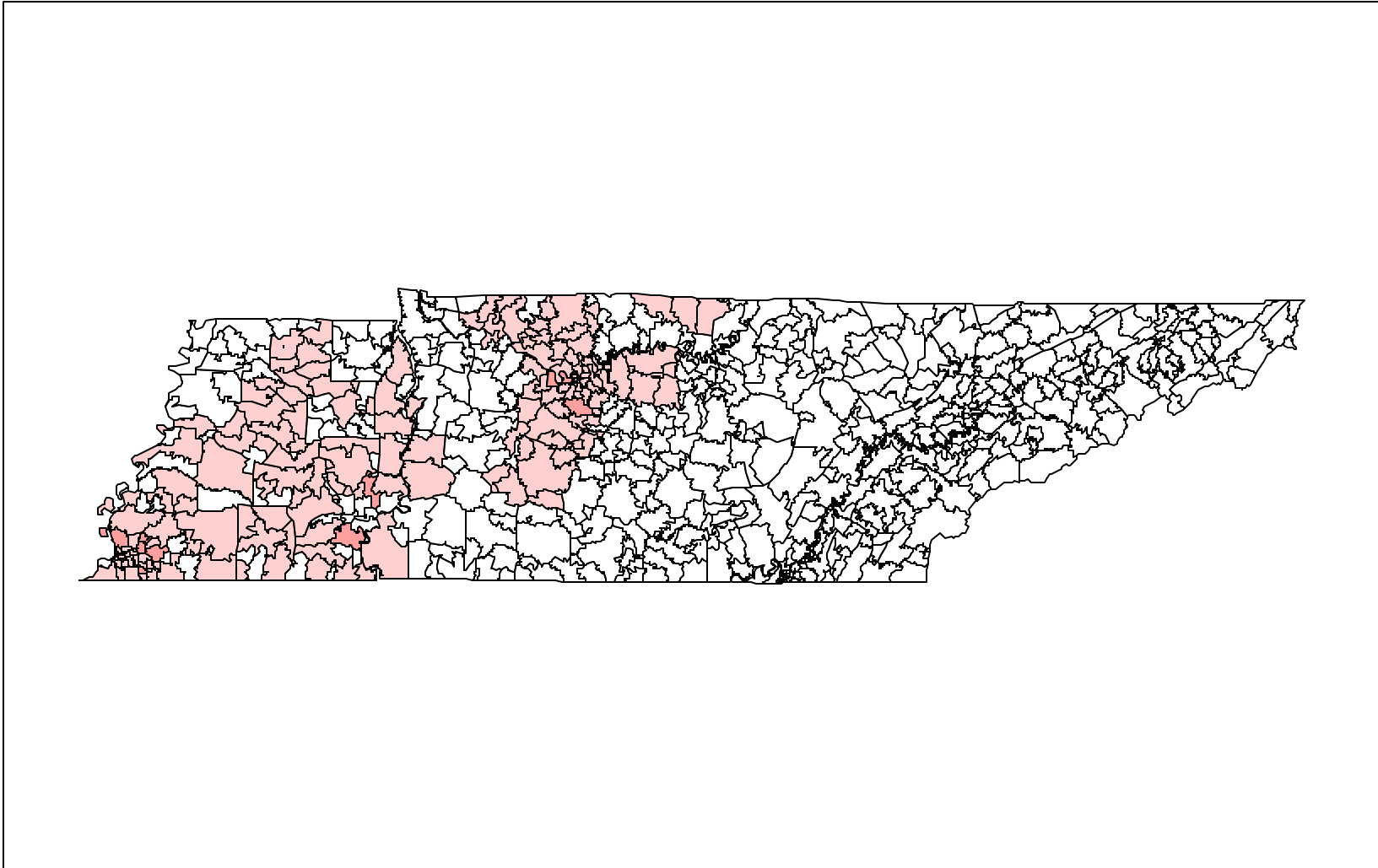
Map 23: Knoxville College



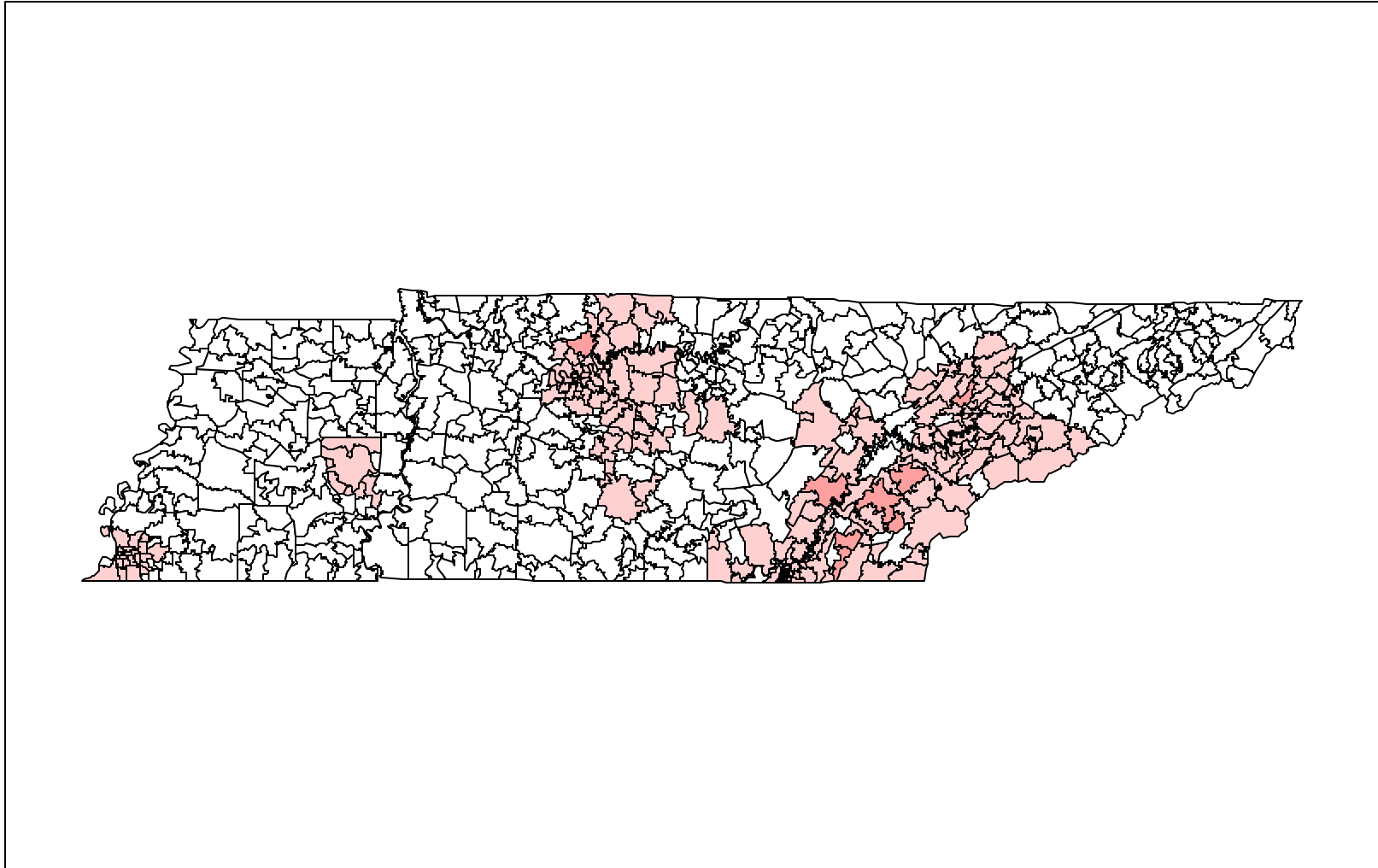
Map 24: Lane College



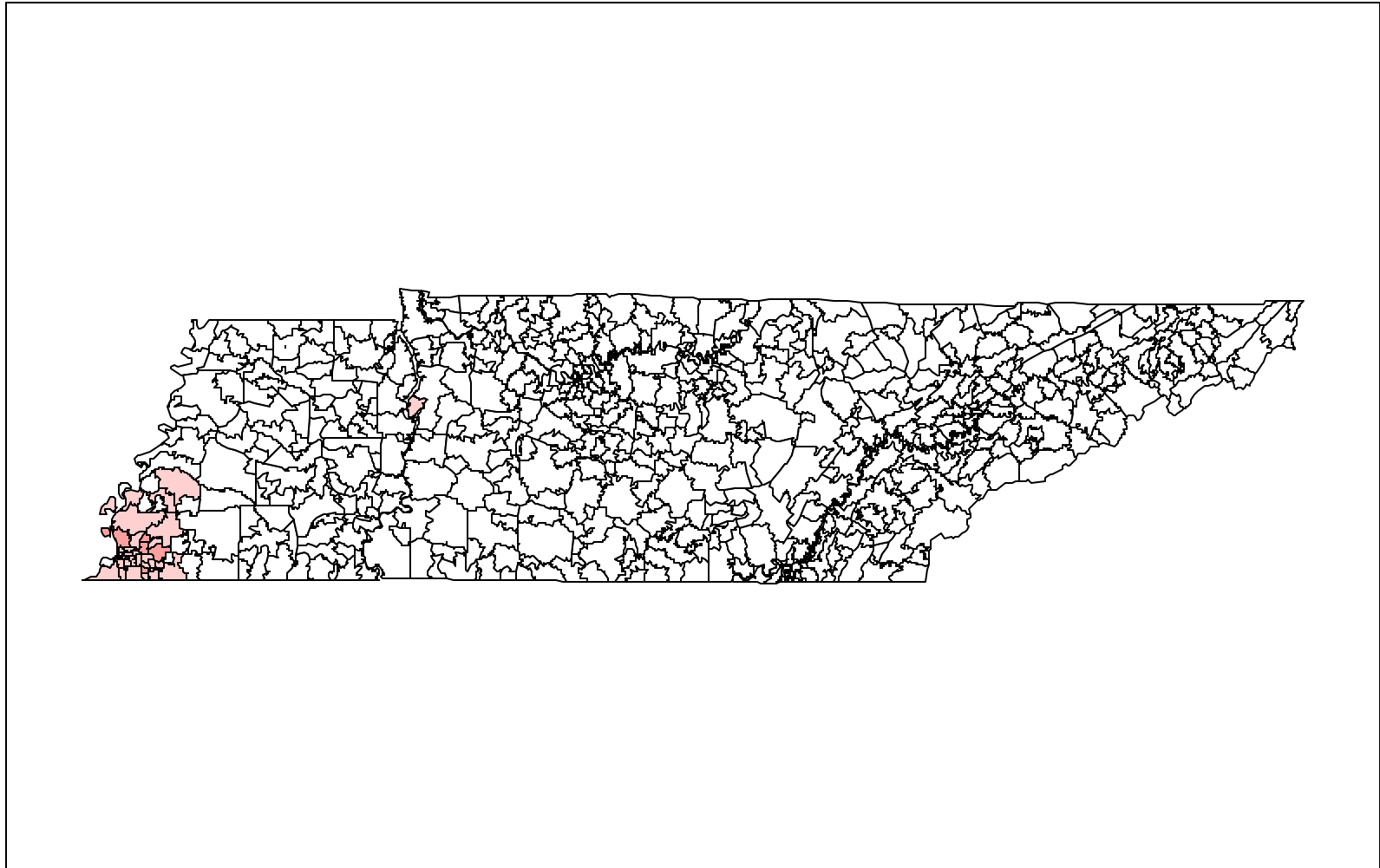
Map 25: Lambuth College



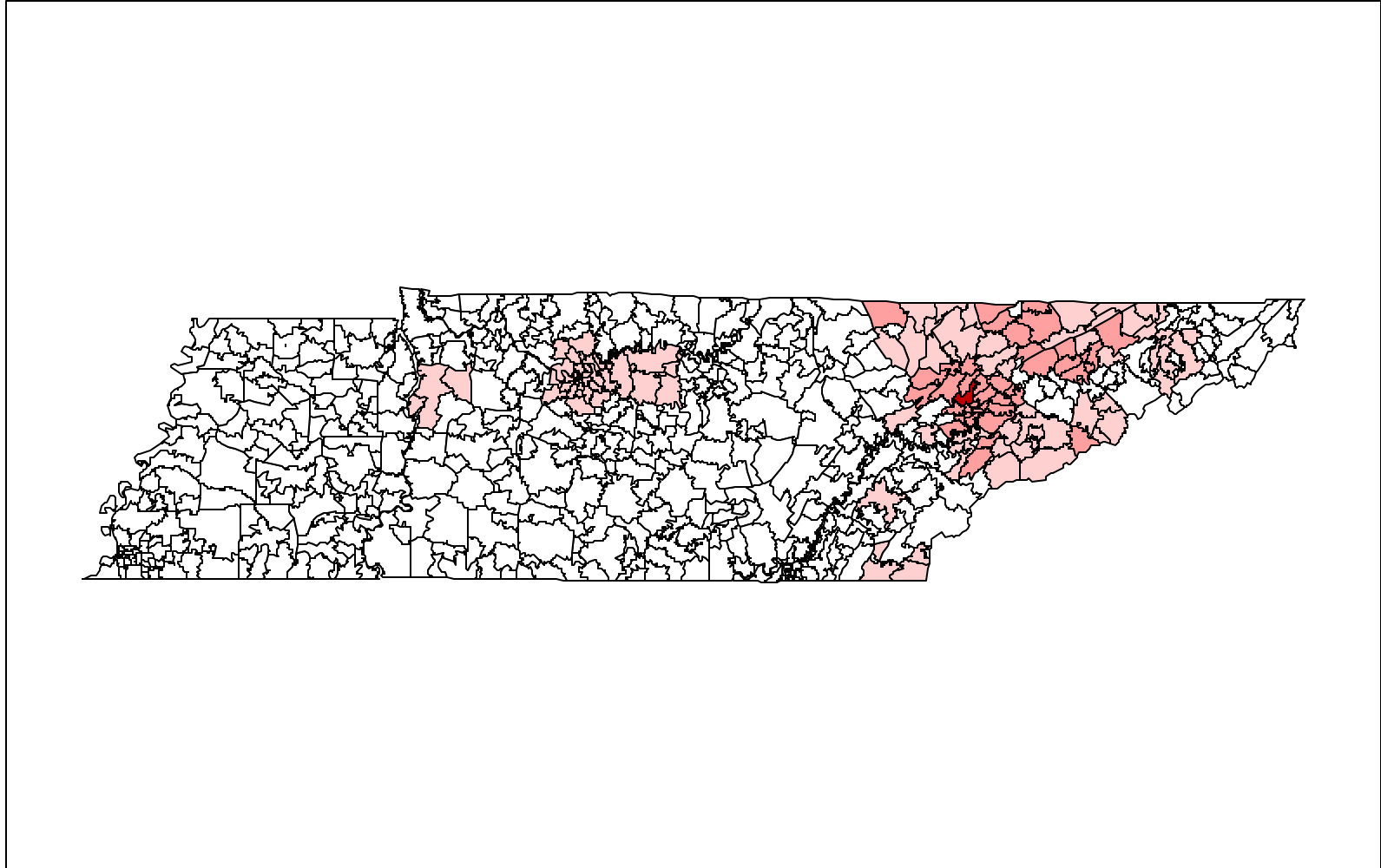
Map 26: Lee College



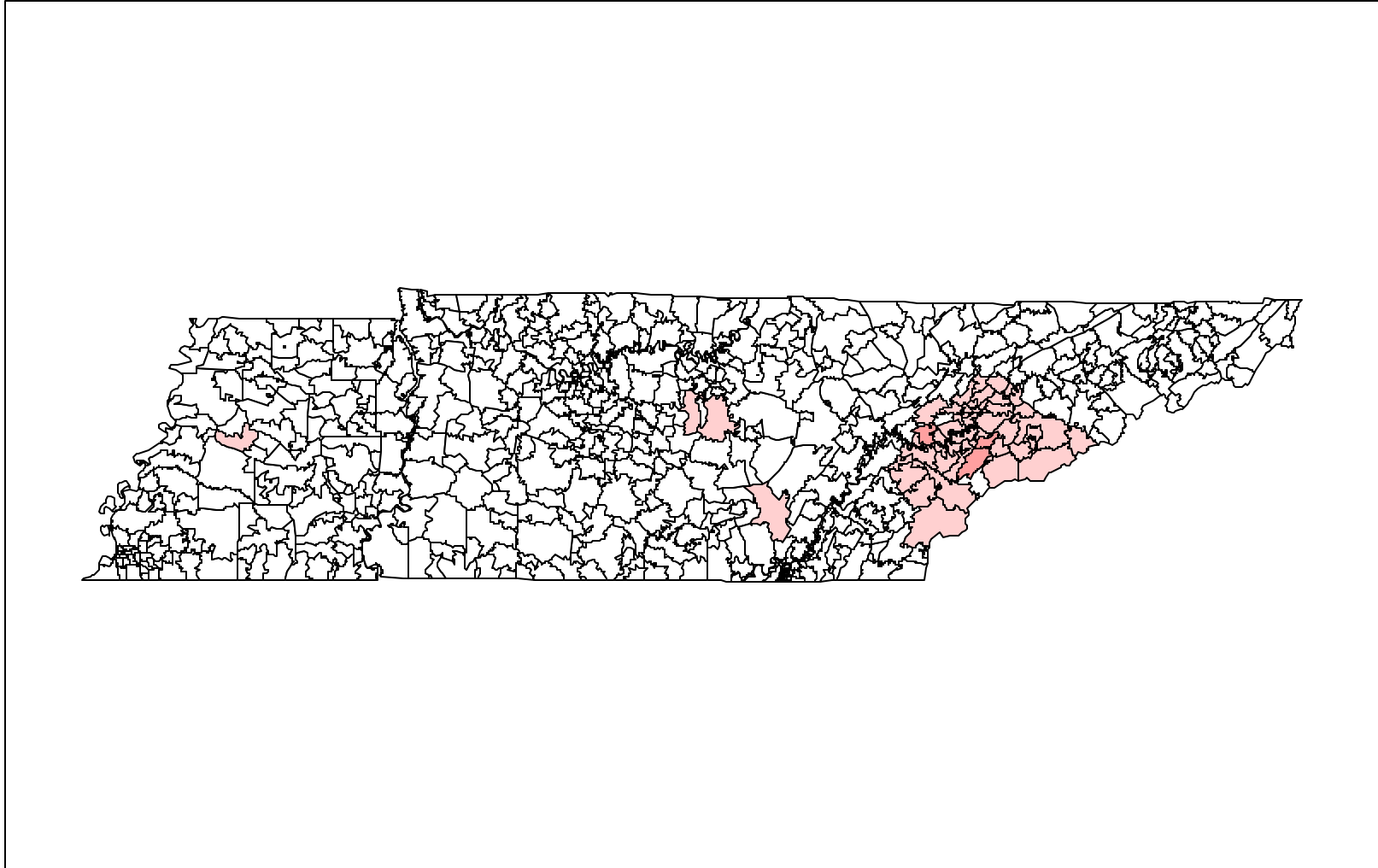
Map 27: Lemoyne-Owen College



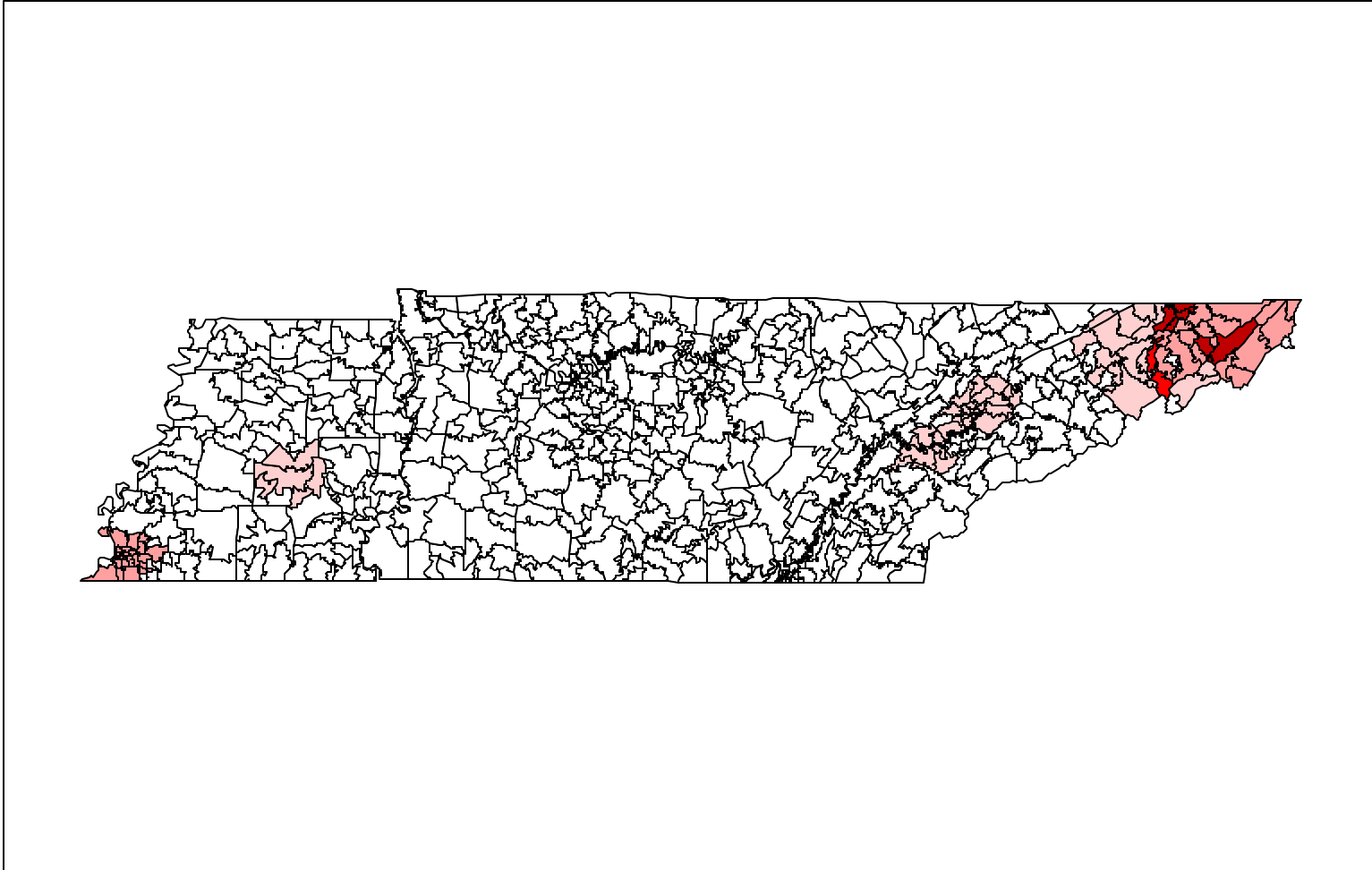
Map 28: Lincoln Memorial University



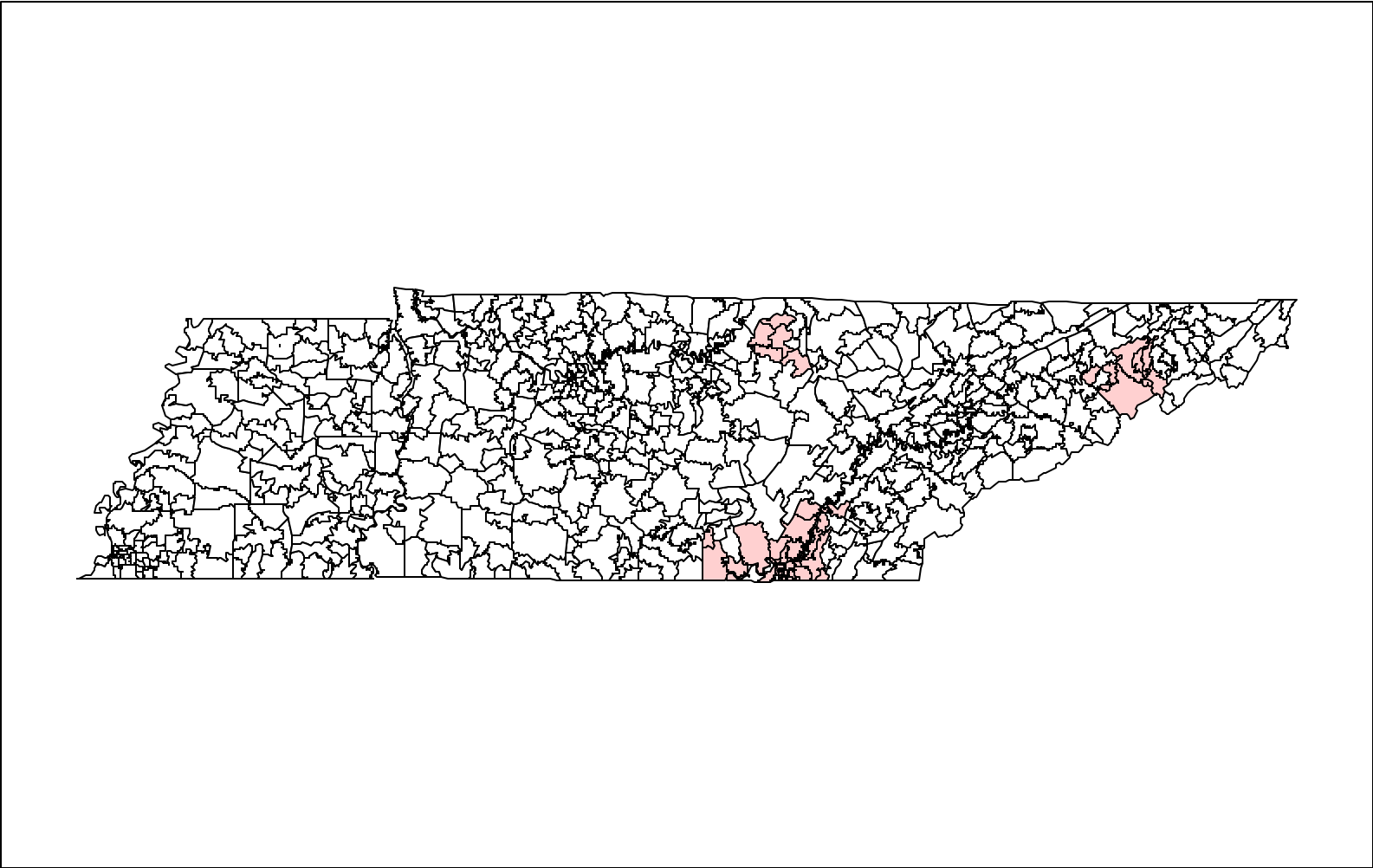
Map 29: Maryville College



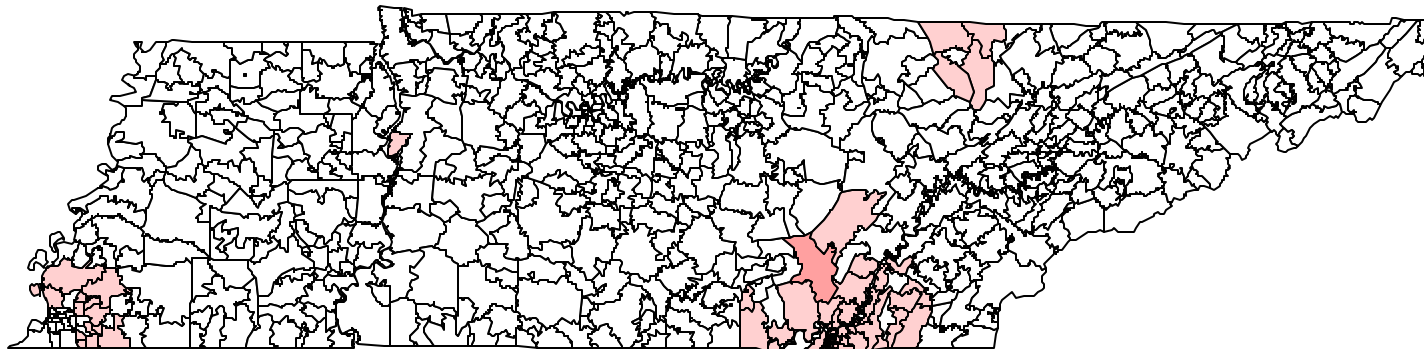
Map 30: Milligan College



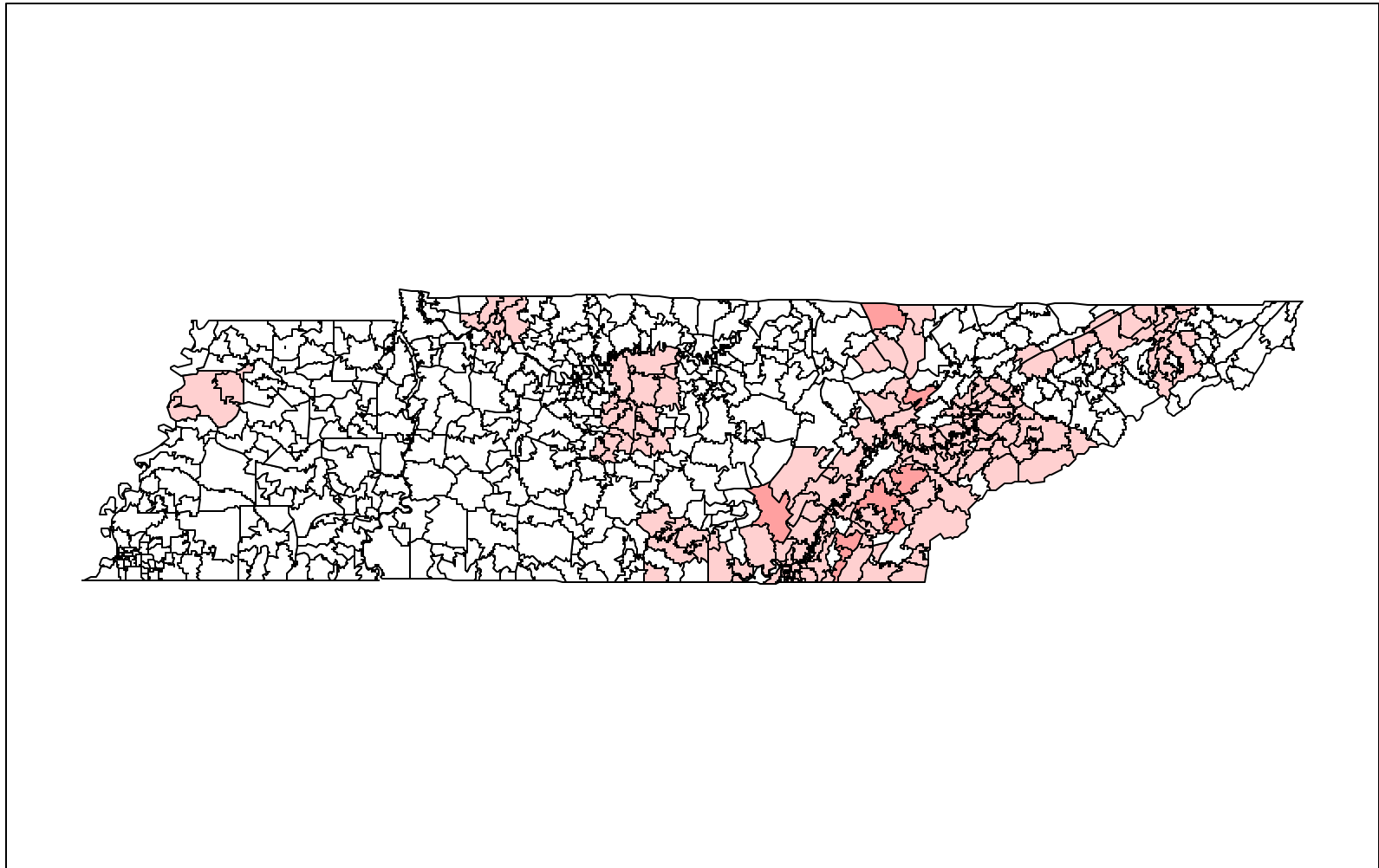
Map 31: Southern College of the 7th Day



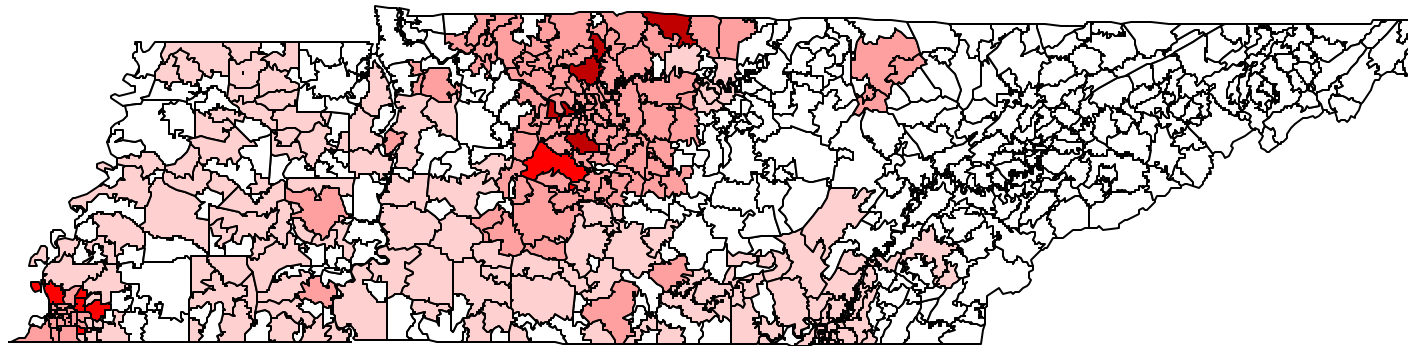
Map 32: Tennessee Temple University



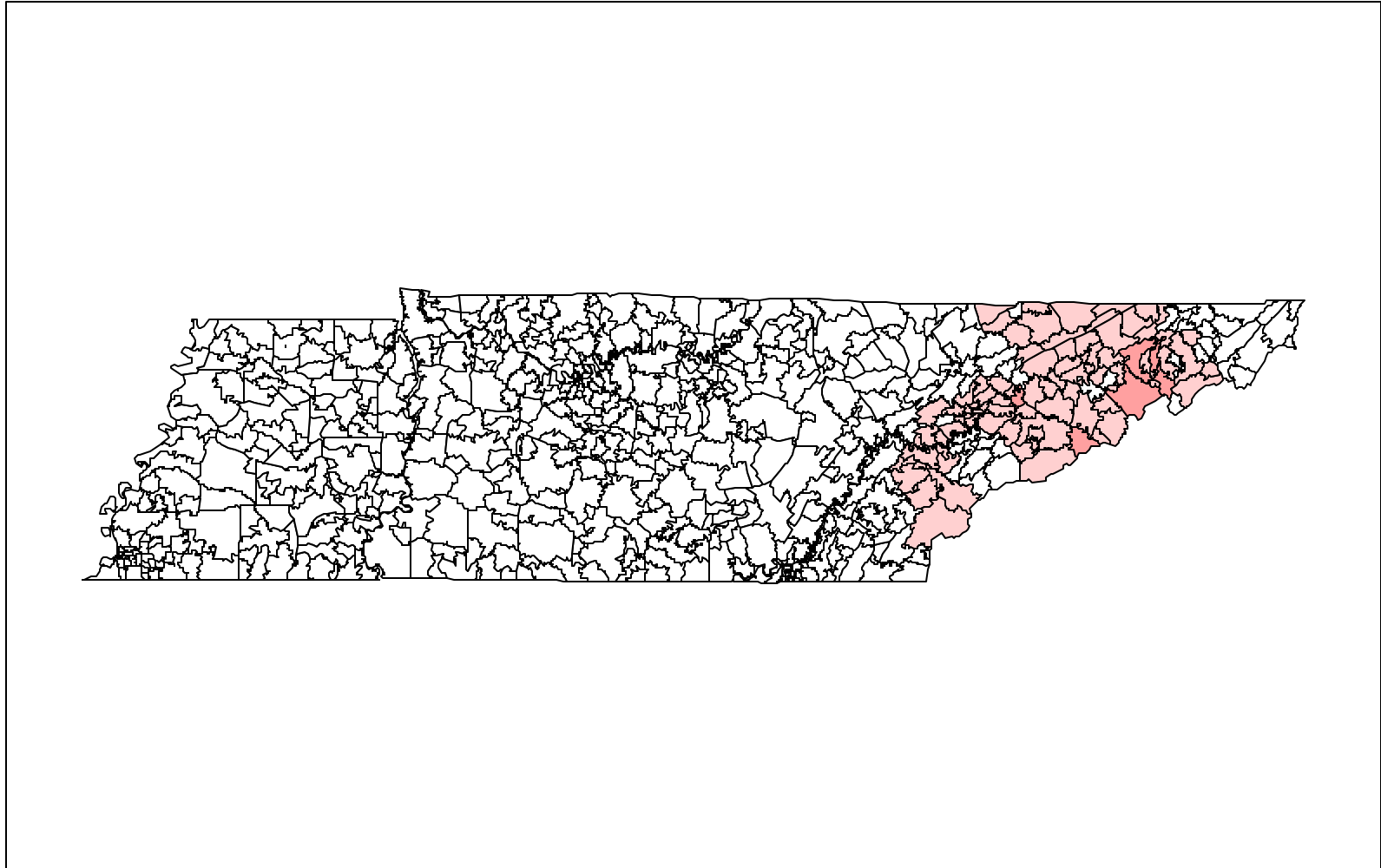
Map 33: Tennessee Wesleyan University



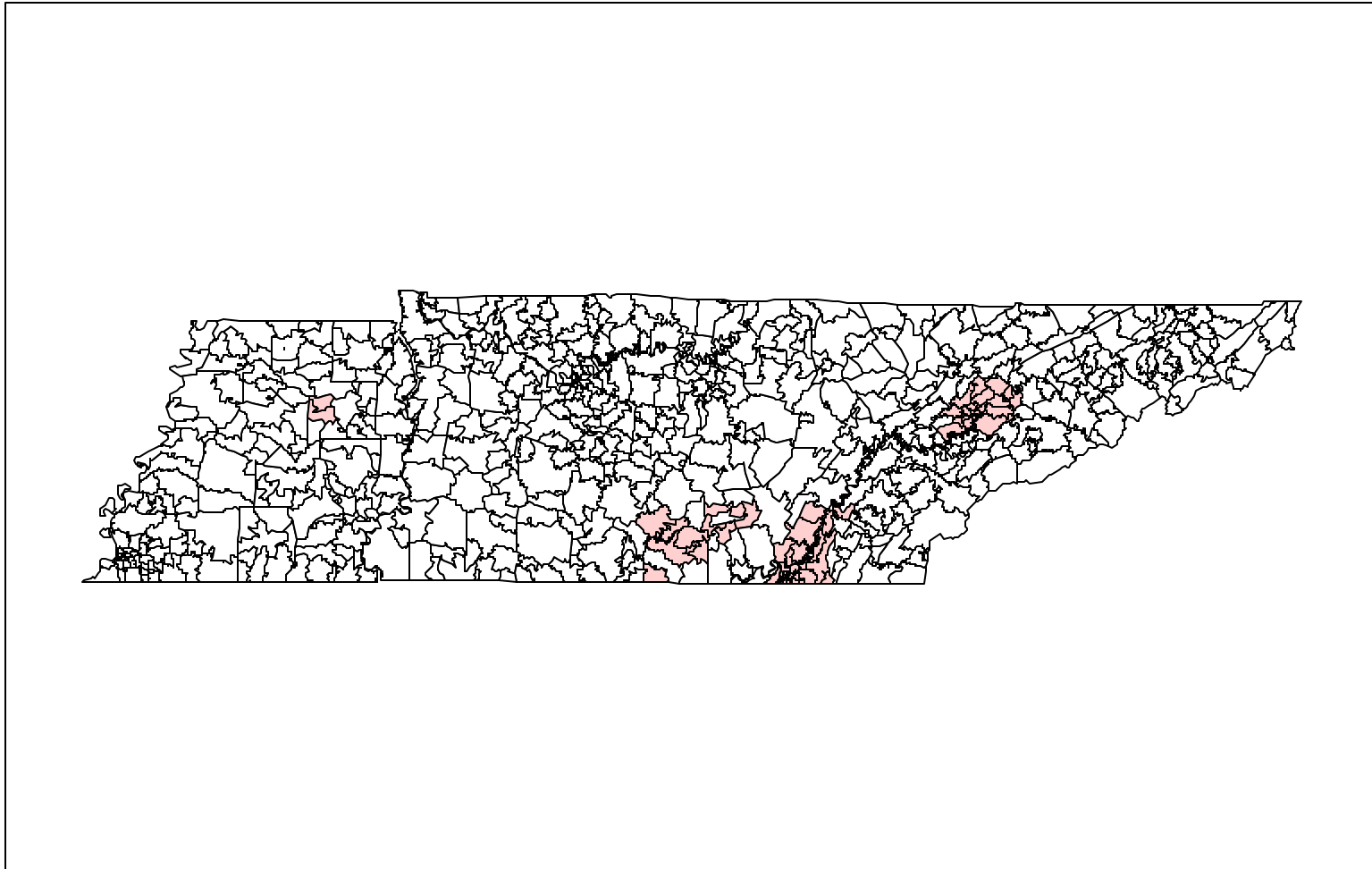
Map 34: Trevecca Nazarene College



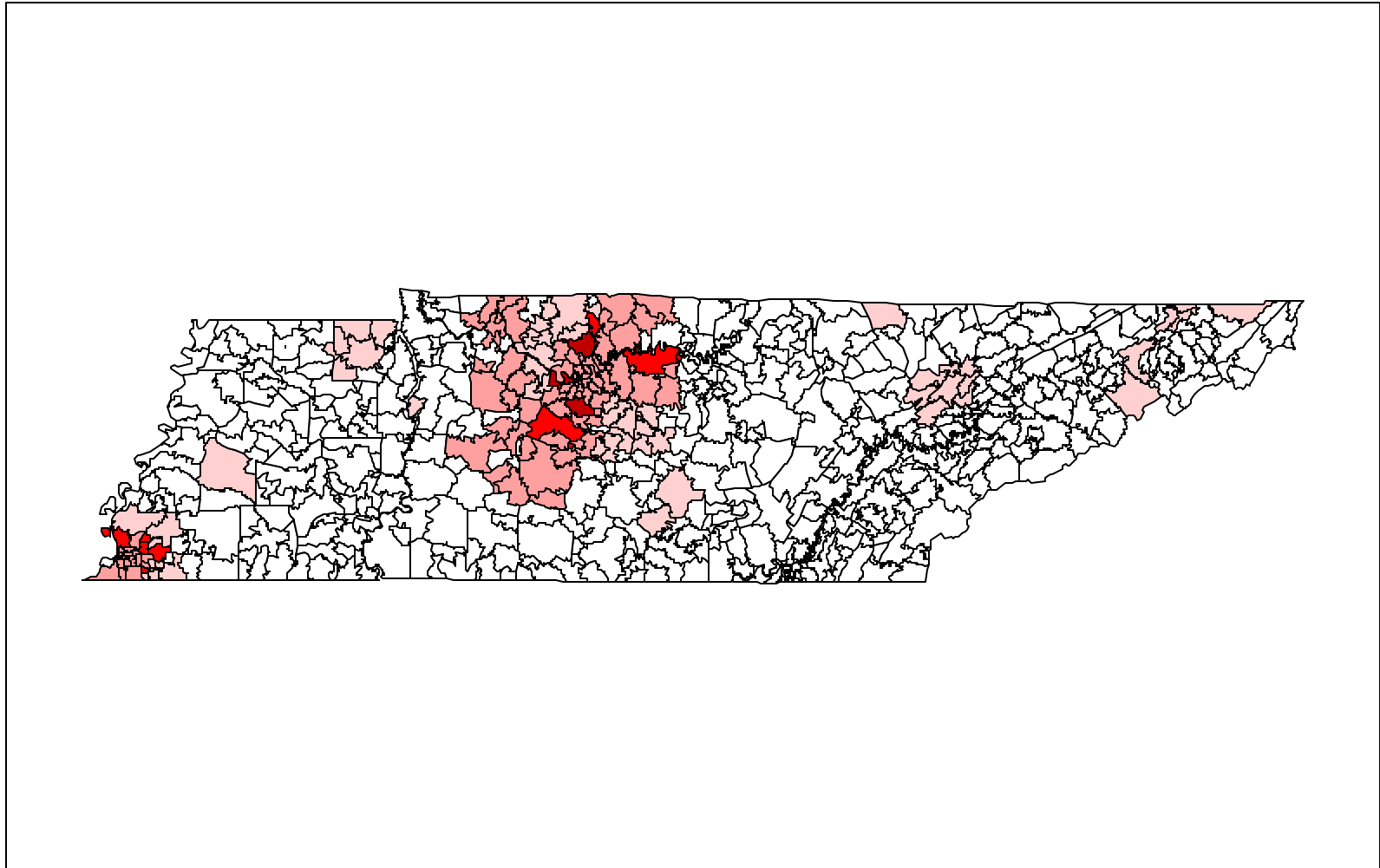
Map 35: Truscum College



Map 36: University of the South



Map 37: Vanderbilt University





Supply and Demand of Educators


The following analysis examines the factors that influence demand—enrollment and student to educator¹⁰ ratios, and the factors that influence supply—entrance, attrition, the reserve pool, waivers and permits. The confluence of these factors is examined by type of position and by district.

Historical Enrollment Analysis at the State Level

A method employed in this analysis is to compare the projected 5 years of demand with the most recent 5 historical years of demand. This provides the reader a means to compare what has been experienced in the past 5 years with what is projected to occur in the following five years. It is a simple and direct way to compare historical trends with projected trends.

 Note: The historical rate of growth of total enrollments, from year to year, has been about 1.5 percent per year for the last 5 years. However, the data show a 1.1 percent drop in enrollments in 1999¹¹.

 Note: The historical change in the total number of educators has varied, with years of increase greater than 2 percent, followed by period of growth less than 1 percent. In 1998 and 1999 teacher growth has exceeded 3 percent for each year. Likewise, in 1998 and 1999 educator growth has exceeded 3 percent for each year.

 Note: The historical student-to-teacher ratio has been around 19 from 1991 to 1997. From 1998 to 1999 the rate has dropped, with the most recent year showing a significant decline to 18.1 percent¹². These changes are also reflected in a recent decline in student to teacher ratios.


 Note: The historical student-to-educator ratio has been around 16.4 up to 1997. From 1998 to 1999 the rate has dropped, with the most recent year showing a significant decline to 15.5 percent¹³. These changes are also reflected in a recent decline in student to teacher ratios.

Table 51: Rates of Growth for Enrollments and Educators

Year	Total Enrollments	Rate of Change	Total Teachers	Rate of Change of Teachers	Student to Teacher Ratio	Total Educators	Rate of Change of Educators	Student to Educator Ratio
1991	880,246		46,378			53,783		16.4
1992	893,272	1.5%	46,537	0.3%	19.2	53,902	0.2%	16.6
1993	906,975	1.5%	47,217	1.5%	19.2	54,903	1.9%	16.5
1994	923,673	1.8%	48,548	2.8%	19.0	56,424	2.8%	16.4
1995	936,400	1.4%	48,758	0.4%	19.2	56,750	0.6%	16.5
1996	948,217	1.3%	49,954	2.5%	19.0	58,130	2.4%	16.3
1997	962,645	1.5%	50,248	0.6%	19.2	58,523	0.7%	16.4
1998	978,438	1.6%	51,923	3.3%	18.8	60,364	3.1%	16.2
1999	967,556	-1.1%	53,583	3.2%	18.1	62,310	3.2%	15.5

¹⁰ Educators include administrators, professional staff, and teachers.

¹¹ The drop in enrollments may be a function of under-reporting and over-reporting by certain districts. This uncertainty about reporting makes clear statements about trends difficult. The report assumes the level of numbers is correct.

¹² Again, note previously stated concern about possible under-reporting.

¹³ Again, note previously stated concern about possible under-reporting.

DEFINITION: The number of live births in a particular year influences, in part, the number of kindergarten students five years hence. Thus live births can be a predictor of kindergarten enrollments.

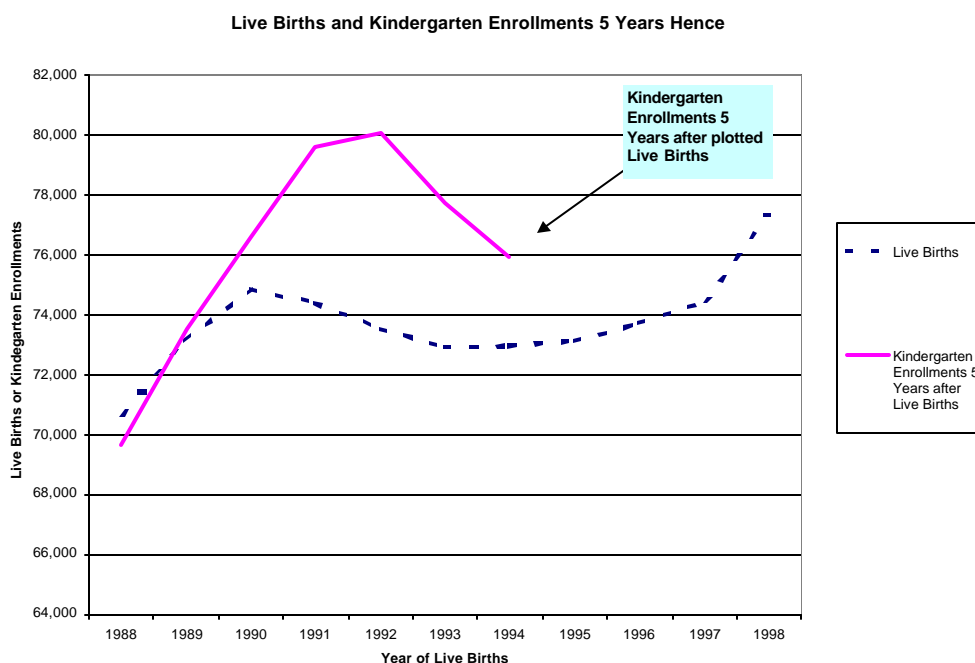
Note: The number of live births grew greatly from 1988 to 1989. Since that point live births have hovered between 72,000 and 74,000. However there was a substantial increase in 1998. Such recent steady growth portends increased kindergarten enrollments five years from the live birth date. This is shown in the figure below, where live births are graphed as well as kindergarten enrollments five years hence from those live births.

Note: Note the measure “rate of entry” is the ratio of kindergarten enrollments to live births. This rate has exceeded the level of one since 1989 indicating that in the intervening years, in-migration, and entry into kindergarten by children of ages other than 5 years old could be contributing the kindergarten enrollments.


Table 52: Recent Live Births in Tennessee


Birth Year	Live Births	Change from Previous Year	Rate of Change	Year of Kindergarten Enrollment	Number Enrolled	Rate of Entry
1988	70,685	2743	4%	1993	69,680	0.99
1989	73,137	2452	3%	1994	73,547	1.01
1990	74,870	1733	2%	1995	76,576	1.02
1991	74,392	-478	-1%	1996	79,597	1.07
1992	73,560	-832	-1%	1997	80,085	1.09
1993	72,923	-637	-1%	1998	77,747	1.07
1994	72,967	44	0%	1999	75,968	1.04
1995	73,139	172	0%	2000	Data not available	
1996	73,710	571	1%	2001	Data not available	
1997	74,458	748	1%	2002	Data not available	
1998	77,334	2876	4%	2003	Data not available	
1999	Data not available					


Figure 4: Live Births and Kindergarten Enrollments 5 Years Hence



Projected Enrollment Analysis at the State Level

 **DEFINITION:** As mentioned, we analyze trends in the enrollment data by looking at the change in enrollments between a range of years. We examine changes in the historical years from 1995 to 1999 (a 5 year period) and compare that to changes in the projected period 2000 to 2004 (another 5 year) period. This provides a means of comparing the most recent 5 years with the projected 5 years.

 Note: **KINDERGARTEN:** In the previous report we had projected¹⁴ that enrollments in kindergarten students would level off over the next five years, barring any great change in net-migration. The most recent years of history bear out this prediction as kindergarten enrollments declined in 1998 and 1999. We project that decline rebounding in the future as we have observed live birth rates climb dramatically in 1997 and 1998. Thus while kindergarten enrollments decline 1% over the past 5 historical years, we project a 6% increase over the next five years from 2000 to 2004 (see table below).

 Note: **ELEMENTARY:** Elementary grades should experience a similar degree of growth from 2000 to 2004, as was experienced from 1995 to 1999 as the decreased number of kindergarten students from 1998 and 1999 enter elementary grades (see table below).


 Note: **MIDDLE SCHOOL:** There will be an increase in middle school students of roughly 6,000 over the projection period of 2000-2004. This is compared with an increase of 4,409 from 1995 to 1999. This increase results from the historically very high enrollments in grades 1-4 moving into grades 5-6 over this period (see table below).

Table 53: Enrollment Rate and Number Changes

	<i>Historical Trends</i>			
	Enrollments 1994-1995	Enrollments 1998-1999	Percent Change 1995-99	Number Change 1995-99
K	76,576	75,968	-1%	-608
1-4	296,048	314,708	6%	18,660
5-6	141,519	145,928	3%	4,409
7-8	144,063	145,830	1%	1,767
9-12	258,471	268,089	4%	9,618
SPED	19,723	17,033	-14%	-2,690
Total	936,400	967,556	3%	31,156

	<i>Projected Trends</i>			
	Enrollments 1999-2000	Enrollments 2003-2004	Percent Change 2000-04	Number Change 2000-04
K	78,820	83,694	6%	4,874
1-4	316,664	335,502	6%	18,838
5-6	150,190	156,279	4%	6,089
7-8	146,954	163,073	11%	16,119
9-12	271,794	287,739	6%	15,945
SPED	16,429	17,373	6%	944
Total	980,852	1,043,659	6%	62,807

¹⁴ The projections are based on the cohort-survival method.

☞ Note: **JUNIOR HIGH SCHOOL:** Junior high school grades (grades 7 and 8) will increase substantially from 2000 to 2004 as historically large cohorts from grades 3 through 7 make their way through the Junior high school grades. Over this period Junior high school enrollments will increase by more than 16,000 students—or an 11 percent increase. This compares to a much lower increase of about 1,700 from 1995-1999 (see table above).

☞ Note: **HIGH SCHOOL:** High school grades will increase by 6 percent from 2000 to 2004, adding almost 16,000 students. *This results from historically large class sizes in grades from grades 4 to 11 moving through these grades.* Grade 4 students in 1999 will be in grade 9 in the year 2004. This compares to an increase of 9,600 from 1995-1999 (see table above).

☞ Note: **SPECIAL EDUCATION:** Special education enrollments are predicted to increase by 6 percent from 2000-2004, or by 944 students. That projection is based on the assumption that special education is a percentage of total enrollments. This percentage has been quite volatile historically, and so special education enrollments are particularly difficult to predict (see table above).


Table 54: Historical and Projected Enrollments


	K		1-4		5-6		7-8		9-12		SPED		Total	
1991	68,100	<i>Growth</i>	284,288	<i>Growth</i>	134,868	<i>Growth</i>	134,085	<i>Growth</i>	240,515	<i>Growth</i>	18,390	<i>Growth</i>	880,246	<i>Growth</i>
1992	68,392	0.4%	287,105	1.0%	137,410	1.9%	135,665	1.2%	243,741	1.3%	20,959	14.0%	893,272	1.5%
1993	69,680	1.9%	287,777	0.2%	140,524	2.3%	138,900	2.4%	249,570	2.4%	20,524	-2.1%	906,975	1.5%
1994	73,547	5.5%	291,880	1.4%	141,531	0.7%	141,903	2.2%	255,736	2.5%	19,076	-7.1%	923,673	1.8%
1995	76,576	4.1%	296,048	1.4%	141,519	0.0%	144,063	1.5%	258,471	1.1%	19,723	3.4%	936,400	1.4%
1996	79,597	3.9%	300,753	1.6%	143,235	1.2%	143,756	-0.2%	262,367	1.5%	18,509	-6.2%	948,217	1.3%
1997	80,085	0.6%	308,051	2.4%	145,781	1.8%	143,579	-0.1%	266,990	1.8%	18,159	-1.9%	962,645	1.5%
1998	77,747	-2.9%	317,938	3.2%	146,506	0.5%	146,963	2.4%	273,613	2.5%	15,671	-13.7%	978,438	1.6%
1999	75,968	-2.3%	314,708	-1.0%	145,928	-0.4%	145,830	-0.8%	268,089	-2.0%	17,033	8.7%	967,556	-1.1%
Projected Enrollments														
2000	78,820	3.8%	316,664	0.6%	150,190	2.9%	146,954	0.8%	271,794	1.4%	16,429	-3.5%	980,852	1.4%
2001	79,578	1.0%	319,299	0.8%	155,523	3.6%	149,459	1.7%	273,754	0.7%	16,629	1.2%	994,242	1.4%
2002	80,494	1.2%	321,450	0.7%	159,212	2.4%	153,835	2.9%	277,350	1.3%	16,860	1.4%	1,009,201	1.5%
2003	83,694	4.0%	327,233	1.8%	157,837	-0.9%	159,287	3.5%	281,533	1.5%	17,122	1.6%	1,026,706	1.7%
2004	83,694	0.0%	335,502	2.5%	156,279	-1.0%	163,073	2.4%	287,739	2.2%	17,373	1.5%	1,043,659	1.7%


☞ **DEFINITION:** The “growth” measure is the rate of change of enrollments from the previous year.


	K		1-4		5-6		7-8		9-12		SPED		Total	
1991	68,100	<i>Change</i>	284,288	<i>Change</i>	134,868	<i>Change</i>	134,085	<i>Change</i>	240,515	<i>Change</i>	18,390	<i>Change</i>	880,246	<i>Change</i>
1992	68,392	292	287,105	2,817	137,410	2,542	135,665	1,580	243,741	3,226	20,959	2,569	893,272	13,026
1993	69,680	1,288	287,777	672	140,524	3,114	138,900	3,235	249,570	5,829	20,524	-435	906,975	13,703
1994	73,547	3,867	291,880	4,103	141,531	1,007	141,903	3,003	255,736	6,166	19,076	-1,448	923,673	16,698
1995	76,576	3,029	296,048	4,168	141,519	-12	144,063	2,160	258,471	2,735	19,723	647	936,400	12,727
1996	79,597	3,021	300,753	4,705	143,235	1,716	143,756	-307	262,367	3,896	18,509	-1,214	948,217	11,817
1997	80,085	488	308,051	7,298	145,781	2,546	143,579	-177	266,990	4,623	18,159	-350	962,645	14,428
1998	77,747	-2,338	317,938	9,887	146,506	725	146,963	3,384	273,613	6,623	15,671	-2,488	978,438	15,793
1999	75,968	-1,779	314,708	-3,230	145,928	-578	145,830	-1,133	268,089	-5,524	17,033	1,362	967,556	-10,882
Projected Enrollments														
2000	78,820	2,852	316,664	1,956	150,190	4,262	146,954	1,124	271,794	3,705	16,429	-604	980,852	13,296
2001	79,578	758	319,299	2,635	155,523	5,333	149,459	2,505	273,754	1,960	16,629	200	994,242	13,390
2002	80,494	916	321,450	2,151	159,212	3,689	153,835	4,376	277,350	3,596	16,860	231	1,009,201	14,959
2003	83,694	3,200	327,233	5,783	157,837	-1,375	159,287	5,452	281,533	4,183	17,122	262	1,026,706	17,505
2004	83,694	0	335,502	8,269	156,279	-1,558	163,073	3,786	287,739	6,206	17,373	251	1,043,659	16,953

Projected Enrollment Analysis at the District Level

 Note: The percent of districts showing growth in *total* enrollments increases from 50 percent in the historical period, to 86 percent in the projected period.

 Note: The percent of districts showing growth in *kindergarten* enrollments increased from 48 percent in the historical period, to 68 percent in the projected period.

 Note: Middle school and junior high school show substantial increases in the percent of districts with enrollment growth. For middle school the percent increases from 41 percent to 72 percent, and for junior high the percent climbs from 44 percent to 80 percent.

 Note: The percent of high school districts with enrollment increases from 44 percent over the 1995-99 period, to 60 percent over the 2000-2004 period.


 Note: The percent of special education enrollment increases from 29 percent over the 1995-99, to 74 percent over the 2000-2004 period.

Table 55: Percentage of Districts by Direction of Change in Enrollments

	1995-1999			2000-2004		
	Percentage of Districts with a Decrease in Enrollments from '95 to '99	Percentage of Districts with a Same Enrollments from '95 to '99	Percentage of Districts with a Increase In Enrollments from '95 to '99	Percentage of Districts with a <i>Projected</i> Decrease in Enrollments from '00 to '04	Percentage of Districts with a <i>Projected</i> Same Enrollments from '00 to '04	Percentage of Districts with a <i>Projected</i> Increase In Enrollments from '00 to '04
Total	50%	0%	50%	14%	1%	86%
Kindergarten	48%	4%	48%	28%	4%	68%
Elementary	34%	1%	65%	20%	1%	79%
Middle School	58%	1%	41%	27%	1%	72%
Junior High School	51%	4%	44%	17%	3%	80%
High School	46%	10%	44%	30%	10%	60%
Special Education	68%	3%	29%	12%	14%	74%

Projection of the Total Educators and Teachers Needed

Note: As shown below, the total number of educators increases over time, in both the historical and projected periods. The projected rates of increase in educators is between less than 1 and 2 percent per year, well in line with historical rates that fluctuate between less than 1 percent to more than 3 percent.

Note: Projected enrollments follow a range of growth between 1 and 2 percent. Note that the student to educator ratios and student to teacher ratios increase by one-tenth of percent from 2002 on as enrollment growth accelerates.

Table 56: Tennessee Total Educators by Year

Year	Total Enrollments	Rate of Change of Enrollments	Total Educators	Rate of Change of Educators	Total Teachers	Rate of Change of Teachers	Student to Educator Ratio	Student to Teacher Ratio
1991	880,246		53,783		46,378		16.4	19.0
1992	893,272	1.5%	53,902	0.2%	46,537	0.3%	16.6	19.2
1993	906,975	1.5%	54,903	1.9%	47,217	1.5%	16.5	19.2
1994	923,673	1.8%	56,424	2.8%	48,548	2.8%	16.4	19.0
1995	936,400	1.4%	56,750	0.6%	48,758	0.4%	16.5	19.2
1996	948,217	1.3%	58,130	2.4%	49,954	2.5%	16.3	19.0
1997	962,645	1.5%	58,523	0.7%	50,248	0.6%	16.4	19.2
1998	978,438	1.6%	60,364	3.1%	51,923	3.3%	16.2	18.8
1999	967,556	-1.1%	62,310	3.2%	53,583	3.2%	15.5	18.1
Projected Enrollments and Educators								
2000	980,852	1.4%	62,648	0.5%	54,216	1.2%	15.4	17.9
2001	994,242	1.4%	63,381	1.2%	54,894	1.3%	15.4	17.9
2002	1,009,201	1.5%	64,304	1.5%	55,640	1.4%	15.5	17.9
2003	1,026,706	1.7%	65,443	1.8%	56,598	1.7%	15.5	18.0
2004	1,043,659	1.7%	66,628	1.8%	57,576	1.7%	15.5	18.0


DEFINITION: In all cases except kindergarten, we have departed from our previous method of conducting projections so that all districts will meet the EIA student to teacher ratios by 2004. This is due to most districts having met such standards. We currently project demand using the last year student to educator ratio held constant through the projection period. For kindergarten we set the ratio at the EIA standard of 20, which is lower than the last year historical rate of 20.4.

NOTE: The changes over the projected period are smaller in terms of educators and teachers needed, but larger in terms of enrollments.

The larger enrollments emerge from historical large kindergarten and elementary grades moving into upper grades, and historically large live births moving into kindergarten.

However, fewer educators are needed as overall attrition is low and student-to-teacher ratios are meeting EIA standards.

Projection of the Number of Teacher Positions Needed

 Note: The following breaks out the projections into grade level positions. The number of teaching positions is projected to increase in all categories. However, there are differences in the rate of change by category. Comparing the changes for the number of teachers from 1994-95 to 1998-99 to the changes in number of educators from 1999-2000 to 2003-2004 we find the following.

- The increase in the number of kindergarten teachers needed from 1995 to 1999 was 404, while the total number of teachers needed from 2000 to 2004 increases from 3,941 to 4,185. Over this time period 975 teachers need to be hired increasing the total number of kindergarten teachers by 244 . The total number of kindergarten teachers in 1999 was 3,725. In 2004, 4,185 total kindergarten teachers will be needed.

Table 57: Estimated Changes in the Number of Positions -- Kindergarten

Year	Teachers	Change in Teachers	Enrollments	Change in Enrollments	Hires	Change in Hires	Student-Teacher Ratio
1993	3,129	3.1%	69,680	1.9%	134	-40	22.3
1994	3,265	4.3%	73,547	5.5%	218	84	22.5
1995	3,321	1.7%	76,576	4.1%	131	-87	23.1
1996	3,505	5.5%	79,597	3.9%	221	90	22.7
1997	3,596	2.6%	80,085	0.6%	199	-22	22.3
1998	3,666	1.9%	77,747	-2.9%	195	-4	21.2
1999	3,725	1.6%	75,968	-2.3%	111	-84	20.4
2000	3,941	3.80%	78,820	3.80%	182	71	20
2001	3,979	1.00%	79,578	1.00%	225	43	20
2002	4,025	1.20%	80,494	1.20%	205	-4	20
2003	4,185	4.00%	83,694	4.00%	105	-101	20
2004	4,185	0.00%	83,694	0.00%	258	154	20

- The number of additional elementary teachers (grades 1-4) increased by 2,095 from 1995-1999, and will increase by a smaller number from 2000-2004 by 1,134. Over this time period 4,924 teachers need to be hired increasing the total number of elementary teachers by 1,134. The total number of elementary teachers in 1999 was 18,951. In 2004, 20,255 total elementary teachers will be needed.

Table 58: Estimated Changes in the Number of Positions -- GRADE 1-4

Year	Teachers	Change in Teachers	Enrollments	Change in Enrollments	Hires	Change in Hires	Student-Teacher Ratio
1993	16,611	1.8%	287,777	0.2%	815	-329	17.3
1994	16,918	1.8%	291,880	1.4%	1,325	510	17.3
1995	16,856	-0.4%	296,048	1.4%	938	-387	17.6
1996	17,182	1.9%	300,753	1.6%	1,267	329	17.5
1997	17,473	1.7%	308,051	2.4%	998	-269	17.6
1998	18,263	4.5%	317,938	3.2%	1,070	72	17.4
1999	18,951	3.8%	314,708	-1.0%	776	-294	16.6
2000	19,069	0.6%	316,664	0.6%	1,083	307	16.6
2001	19,227	0.8%	319,299	0.8%	1,056	-26	16.6
2002	19,357	0.7%	321,450	0.7%	1,092	35	16.6
2003	19,705	1.8%	327,233	1.8%	904	-188	16.6
2004	20,203	2.5%	335,502	2.5%	789	-115	16.6

- The number of additional middle school teachers (grade 5-6) increased by 467 from 1995-99, and will increase by a smaller number, 246 from 2000-2004. Over this time period 1,586 teachers need to be hired increasing the total number of middle school teachers by 246. The total number of middle school teachers in 1999 was 5,911. In 2004, 6,330 total middle school teachers will be needed.

Table 59: Estimated Changes in the Number of Positions -- GRADE 5-6

Year	Teachers	Change in Teachers	Enrollments	Change in Enrollments	Hires	Change in Hires	Student-Teacher Ratio
1993	5,191	3.6%	140,524	2.3%	281	-52	27.1
1994	5,364	3.3%	141,531	0.7%	437	156	26.4
1995	5,444	1.5%	141,519	0.0%	331	-106	26.0
1996	5,607	3.0%	143,235	1.2%	423	92	25.5
1997	5,572	-0.6%	145,781	1.8%	312	-111	26.2
1998	5,749	3.2%	146,506	0.5%	341	29	25.5
1999	5,911	2.8%	145,928	-0.4%	237	-104	24.7
2000	6,084	2.9%	150,190	2.9%	216	-21	24.7
2001	6,300	3.6%	155,523	3.6%	188	-29	24.7
2002	6,449	2.4%	159,212	2.4%	264	77	24.7
2003	6,393	-0.9%	157,837	-0.9%	457	193	24.7
2004	6,330	-1.0%	156,279	-1.0%	461	4	24.7

- The number of additional Junior high school teachers (grade 7-8) increased by 879 additional teachers needed from 1995-99 and will require a smaller increase of 605 teachers from 2000-2004. Over this time period 1,910 teachers need to be hired increasing the total number of junior high school teachers by 605. The total number of junior high school teachers in 1999 was 5,655. In 2004, 6,305 total junior high school teachers will be needed.

Table 60: Estimated Changes in the Number of Positions -- GRADE 7-8

Year	Teachers	Change in Teachers	Enrollments	Change in Enrollments	Hires	Change in Hires	Student-Teacher Ratio
1993	4,542	0.5%	140,586	2.4%	243	-88	31.0
1994	4,715	3.8%	143,493	2.1%	351	108	30.4
1995	4,776	1.3%	145,818	1.6%	285	-66	30.5
1996	5,385	12.8%	145,282	-0.4%	396	111	27.0
1997	5,368	-0.3%	144,967	-0.2%	362	-34	27.0
1998	5,431	1.2%	148,205	2.2%	358	-4	27.3
1999	5,655	4.1%	147,187	-0.7%	276	-82	26.0
2000	5,700	-1.1%	148,345	0.8%	442	166	26.0
2001	5,796	0.7%	150,846	1.7%	394	-48	26.0
2002	5,959	3.7%	155,112	2.8%	346	-48	26.0
2003	6,164	3.7%	160,439	3.4%	323	-23	26.0
2004	6,305	3.4%	164,105	2.3%	405	82	26.0

- The number of additional High school (grades 9-12) teachers increased by 364 teachers from 1995-99, and will require 794 from 2000-2004. The total number of high school teachers in 1999 was 13,344. Over this time period 3,319 teachers need to be hired increasing the total number of high school teachers by 794. A total of 14,322 high school teachers will be needed in 2004.

Table 61: Estimated Changes in the Number of Positions -- GRADE 9-12

Year	Teachers	Change in Teachers	Enrollments	Change in Enrollments	Hires	Change in Hires	Student-Teacher Ratio
1993	12,635	0.1%	249,570	2.4%	736	-370	19.8
1994	12,934	2.4%	255,736	2.5%	1,058	322	19.8
1995	12,980	0.4%	258,471	1.1%	894	-164	19.9
1996	12,709	-2.1%	262,367	1.5%	1,173	279	20.6
1997	12,632	-0.6%	266,990	1.8%	873	-300	21.1
1998	13,054	3.3%	273,613	2.5%	974	101	21.0
1999	13,344	2.2%	268,089	-2.0%	726	-248	20.1
2000	13,528	1.4%	271,794	1.4%	652	-74	20.1
2001	13,626	0.7%	273,754	0.7%	743	90	20.1
2002	13,805	1.3%	277,350	1.3%	677	-65	20.1
2003	14,013	1.5%	281,533	1.5%	662	-15	20.1
2004	14,322	2.2%	287,739	2.2%	585	-77	20.1

- The number of additional special education teachers needed increased by 544 from 1995-99, and is projected to increase by 341 teachers from 2000-2004. Over this time period 1,875 teachers need to be hired increasing the total number of special education teachers by 341. The total number of special education teachers in 1999 was 5,804. A total of 6,119 special education teachers will be needed in 2004.

Table 62: Estimated Changes in the Number of Positions – SPECIAL EDUCATION

Year	Educators	Change in Educators	Enrollments	Change in Enrollments	Hires	Change in Hires	Student-Teacher Ratio
1993	5,017	0.8%	20,524	-2.1%	312	-132	4.1
1994	5,235	4.3%	19,076	-7.1%	497	185	3.6
1995	5,260	0.5%	19,723	3.4%	332	-165	3.7
1996	5,421	3.1%	18,509	-6.2%	471	139	3.4
1997	5,460	0.7%	18,159	-1.9%	435	-36	3.3
1998	5,587	2.3%	15,671	-13.7%	422	-13	2.8
1999	5,804	3.9%	17,033	8.7%	338	-84	2.9
2000	5,778	-0.4%	16,429	-3.5%	364	26	2.8
2001	5,850	1.3%	16,629	1.2%	369	5	2.8
2002	5,930	1.4%	16,860	1.4%	374	5	2.8
2003	6,025	1.6%	17,122	1.6%	381	6	2.8
2004	6,119	1.5%	17,373	1.5%	387	6	2.8

- The number of additional administrators needed increased by 194 from 1995-99, and will increase by a smaller number, 176, from 2000-2004. Over this time period 930 administrators need to be hired increasing the total number of administrators by 176. The total number of administrators in 1999 was 2,750. A total of 2,960 administrators will be needed in 2004.

Table 63: Estimated Changes in the Number of Positions – ADMINISTRATORS


Year	Educators	Change in Educators	Enrollments	Change in Enrollments	Hires	Change in Hires	Student-Teacher Ratio
1993	2,487	0.8%	906,975	1.5%	105	-87	364.7
1994	2,530	1.7%	923,673	1.8%	193	88	365.1
1995	2,556	1.0%	936,400	1.4%	122	-71	366.4
1996	2,578	0.9%	948,217	1.3%	166	44	367.8
1997	2,638	2.3%	962,645	1.5%	121	-45	364.9
1998	2,695	2.2%	978,438	1.6%	139	18	363.1
1999	2,750	2.0%	967,556	-1.1%	20	-119	351.8
2000	2,784	1.2%	980,852	1.4%	180	160	352.3
2001	2,822	1.3%	994,242	1.4%	183	2	352.4
2002	2,863	1.5%	1,009,201	1.5%	186	3	352.5
2003	2,912	1.7%	1,026,706	1.7%	189	3	352.5
2004	2,960	1.6%	1,043,659	1.7%	192	3	352.6


- The number of additional staff needed increased by 541 from 1995-99, and will increase by a smaller number, 368, from 2000-2004. The total number of staff in 1999 was 5,977. Over this time period 1,926 staff need to be hired increasing the total number of staff by 368. A total of 6,414 staff will be needed in 2004.


Table 64: Estimated Changes in the Number of Positions – STAFF

Year	Educators	Change in Educators	Enrollments	Change in Enrollments	Hires	Change in Hires	Student-Educator Ratio
1993	5,199	6.2%	906,975	1.5%	295	-117	174.5
1994	5,346	2.8%	923,673	1.8%	439	144	172.8
1995	5,436	1.7%	936,400	1.4%	306	-133	172.3
1996	5,598	3.0%	948,217	1.3%	395	89	169.4
1997	5,637	0.7%	962,645	1.5%	363	-32	170.8
1998	5,746	1.9%	978,438	1.6%	328	-35	170.3
1999	5,977	4.0%	967,556	-1.1%	168	-160	161.9
2000	6,046	1.2%	980,852	1.4%	373	205	162.2
2001	6,123	1.3%	994,242	1.4%	379	5	162.4
2002	6,210	1.4%	1,009,201	1.5%	385	6	162.5
2003	6,314	1.7%	1,026,706	1.7%	391	7	162.6
2004	6,414	1.6%	1,043,659	1.7%	398	7	162.7

Examining Historical Student to Teacher Ratios

 **DEFINITION:** The following table examines changes in the student-to-teacher ratios as calculated from the Tennessee Preliminary Reports (which provide information on the number of students per class).

 Note: In general, the ratios became smaller (that is better) over time from 1995-96 to 1996-97 and as measured in 1998-99. This suggests that most districts have been successful in finding supply to meet the demands set by the EIA standards.

 Note: The only area that seems to be facing a sustained difficulty in reaching the standard is the kindergarten grade. There has been substantial improvement where 79 percent of the districts equaled or bettered the standard in 1998-99, up from only 59 percent in 1996-97.




 Note: Improvements are seen in all other areas, except for certain positions in high school that show very small declines: language arts, foreign languages, and mathematics.


Table 65: Percent of Districts Meeting EIA Student-Teacher Ratio Standards by School Year

Standard	Category	1995-96		1996-97		1998-99	
		Better or Equal to Standard	Worse than Standard	Better or Equal to Standard	Worse than Standard	Better or Equal to Standard	Worse than Standard
20	Kindergarten	56%	44%	59%	41%	79%	21%
20	Elementary	89%	11%	83%	17%	91%	9%
25	Middle School	87%	13%	86%	14%	94%	6%
30	Junior HS	99%	1%	100%	0%	100%	0%
30	HS Business	99%	1%	99%	1%	100%	0%
30	HS Language Arts	99%	1%	100%	0%	98%	2%
30	HS Social Studies	97%	3%	97%	3%	99%	1%
30	HS Foreign Language	97%	3%	98%	2%	97%	3%
30	HS Mathematics	100%	0%	100%	0%	99%	1%
30	HS Science	100%	0%	99%	1%	99%	1%
20	HS Vocational	88%	22%	81%	19%	81%	19%

Reserve Pool Analysis

 **DEFINITION:** The reserve pool is composed of those educators who have credentials to teach, but are currently not hired in the Tennessee public education system. The issue in examining the reserve pool is ---are there many or few individuals in particular subject areas?

 **DEFINITION:** The current reserve pool is estimated by: taking all persons certified after 1994 with valid licenses with expiration dates post-1999, removing those persons with over 25 years experience, those who died, and those currently in the workforce.

 **DEFINITION:** The number of persons in the reserve pool is estimated by taking the total number of endorsements and dividing by the number of persons. The reason this is done is because individuals can have more than one endorsement (there are cases of persons with 19 endorsements). Thus, there are more endorsements than persons. In this case there are 35,020 endorsements shared among 17,445 individuals or approximately 2 endorsements per person. So taking half of the endorsements reported provides a rough estimate of the number of persons in the reserve pool.


 Note: Table 66 shows the large number of endorsements in broad categories. Notable categories below 100 endorsements are Home Economics, ESL, Reading, Theatre, and Technology Education. However, as table 67 shows, a different picture emerges when the areas are broken out into greater detail.

Table 66: Certification Pool by Broad Areas, Sorted from Highest to Lowest

Certification Area	Number of Endorsements
Elementary	16138
Special Education	3529
Social Science	3209
Business	1991
Science	1889
English	1566
Math	1065
Physical Education	976
Music	964
Trade & Industry	598
Health	559
Foreign Language	502
Art	473
Counselor	410
Librarian	237
School Psychologist	205
Miscellaneous	142
Home Economics	97
Communications	94
ESL	83
Reading	76
Admin	57
Agriculture	42
Theatre	42
Social Worker	39
Technology Education	37
Grand Total	35020

Note: The following shows the detail of the endorsements for the reserve pool. Within each area the endorsements are sorted from lowest number to highest number.

Table 67: Reserve Pool—Number of Endorsements by Area, Sorted within Area, from Lowest to Highest

Admin		Communications	
Admin-Supv. Of Material	3	Comm.-Speech Comm. 7-12	27
Admin-Food Service Supv	4	Comm.-Speech	67
Admin-Voc Ed. Dir/Admin	6	Communications Total	94
Admin-Supv of Attendance	7	Counselor	
Admin Coop Coordinator	8	Staff-School Counselor K-8	410
Admin-Superintendent	8	Counselor Total	410
Admin Supv K-8	21	Elementary	
Admin Total	57	Elementary Grades 1-9	37
Agriculture		Elem-Kindergarten-Grade 3	1,219
Voc.-Tech.-Voc Agricultural	42	Elem.-Pre K-3 Early Child	1,491
Agriculture Total	42	Elementary Grades 1-8	3,905
Art		Middle Grade Spec. G 1-8	4,579
Art & Music-Crafts/Art Apprec.	5	Elem-K- 8 Early Grade Spec.	4,907
Art & Music-Art K-12	190	Elementary Total	16,138
Art & Music-Visual Arts K-12	278	English	
Art Total	473	English	1,566
Business		English Total	1,566
Voc. Office Ed.	10	ESL	
Business-Marketing Education	13	ESL	83
Voc.-Tech.Office Technology	18	ESL Total	83
Voc.-Tech.Salesmanship	34	Foreign Language	
Business-Consumer Education	39	For. Lang.-Other Foreign Language	2
Voc.-Tech.Secretarial Practice	39	For. Lang.-Russian	4
Voc.-Tech.Office/Clerical Prac	51	For. Lang.-Russian 7-12	5
Voc.-Tech.Shorthand	51	For. Lang.-Latin	21
Business-Basic Business	60	For. Lang.-German	49
Business-Accounting	61	For. Lang.-French	146
Voc.-Tech-Data Processing	62	For. Lang.-Spanish	275
Business Machines	69	Foreign Language Total	502
Business Law	83	Health	
Business-Bookkeeping	92	Health-Health Instruction	31
Business Arithmetic	104	Health-Health K-12	221
Business English	111	Health-Health and PE K-12	307
Voc.-Tech-Typewriting	113	Health Total	559
Business-General Business	158		
Business- Misc	823		
Business Total	1,991		

~Table 67 continued: Detail of the Reserve Pool, Sorted within Area from Lowest to Highest

Home Economics	
Voc.-Home Economics	9
Voc Home Economics	88
Home Economics Total	97
Librarian	
Staff-Librarian K-12	237
Librarian Total	237
Math	
Mathematics	1,065
Math Total	1,065
Miscellaneous	
Misc.-Bible	39
Misc.-Driver Education	103
Miscellaneous Total	142
Music	
Art & Music-Instrumental Music	42
Art & Music-Vocal/General Music	46
Art & Music-School Music K-12	120
Art & Music-Voc/Gen Music K-12	342
Art & Music-Instr Music K-12	414
Music Total	964
Physical Education	
Physical Ed. K-8	61
Physical Ed. 7-12	127
Physical Ed. K-12	788
Physical Education Total	976
Reading	
Spec. Tchr Rdng K-12	16
Spec. Tchr Rdng K-8	60
Reading Total	76
School Psychologist	
Staff-School Psychologist	205
School Psychologist Total	205

Science	
Science-Aeronautics	1
Science-Earth Science	24
Science-Earth & Space Science	73
Science-Physics	136
Science-Chemistry	330
Science-General Science	381
Science-Biology	944
Science Total	1889
Social Science	
Social Science-Sociology 7-12	19
Social Sciences-Psychology 7-12	36
Social Science-Economics 7-12	80
Social Science-Geography 7-12	168
Social Science-Social Studies	187
Social Sciences-Psychology	197
Social Science-Geography	217
Social Science-Economics	237
Social Science-Government 7-12	250
Social Science-Government	274
Social Science-Sociology	274
Social Science-History	577
Social Science-History 7-12	693
Social Science Total	3,209
Social Worker	
Staff-Social Worker	39
Social Worker Total	39
Special Education	
Sp. Ed.-Educable Ment. Ret.	5
Sp. Ed. Visually Impaired	12
Sp. Ed. Deaf K-12	18
Sp. Ed. Vision PreK-12	19
Sp. Ed. Hear PreK-12	46
Sp. Ed. Erly Ch. Prek-1	101
Sp. Ed. Speech/Hearing K-12	101
Sp. Ed. Sp/Lan PreK-12	181
Sp. Ed. Comp. K-12	554
Sp. Ed. Special Education	1,110
Sp. Ed. Modified K-12	1,382
Special Education Total	3,529

~Table 67 continued: Reserve Pool—Number of Endorsements by Area, Sorted within Area from Lowest to Highest


Technology Education	
Materials and Process Tech	1
Voc. Tech. -Power Mechanics	1
Voc.-Tech-Comm. & Med. Tech.	2
Voc.-Tech.Industrial Arts	33
Technology Education Total	37
Theatre	
Art & Music-Theatre K-12	42
Theatre Total	42
Trade & Industry	
Voc. Tech.-Elec/Electronics	3
Voc.-Tech.Prof.Vocational	4
Voc.-Tech-Drafting	5
Voc.-Tech.-Metals	7
Voc.-Tech-Graphics Arts	7
Voc. Tech. -Plastics	8
Voc.-Tech.-Woods	9
Voc.-Tech. Misc.	555
Trade & Industry Total	598
Grand Total	35,020


Note: When endorsement counts can be matched with positions, librarians have the smallest percentage of endorsements relative to the number of educators in the workforce. Counselors, special education, math, elementary, and foreign languages follow this.


Table 68: Endorsement as Percent of Educator Position

Certification Area	Estimated Number of Endorsements in Reserve Pool	Educators in 1999	Endorsements as a Percent of Educators: 1999
Librarian	237	1428	17%
Counselor	410	1676	24%
Special Education	3529	5804	61%
Math	1065	1369	78%
Elementary	16138	18951	85%
Foreign Language	502	516	97%
English	1566	1013	155%
Science	1889	1042	181%
Social Science	3209	1025	313%
Business	1991	341	584%

Waiver and Permit Analysis

 **DEFINITION:** The table below shows waivers and permits is sued by area for 1998-1999 *and* 1999-2000 grouped by the areas of special education, general education, vocational education, and other. Within those areas waivers and permits are sorted from highest to lowest based on the sum of waivers and permits for 1999-2000.

 Note: The broad area of general education has the most waivers and permits in 1999-2000 holding more than 66 percent. Within that area, elementary grades, mathematics, social studies, health & physical education with drivers' education, and science top the list.

 Note: Special education as an area follows at 27 percent of the totals of waivers and permits for 1999-2000. Within that area, special education as a category dominates, followed by resource, speech/language, and ESL.


 Note: Vocational as an area provides 6 percent of the waivers and permits in 1999-2000, topped by Trade & Industrial.

Table 69: Waivers and Permits by Area

Area	Waivers		Permits		Sum Waivers & Permits: 1998-1999	Sum Waivers & Permits: 1999- 2000
	1998- 1999	1999- 2000	1998- 1999	1999- 2000		
<u>Special Education</u>						
Special Education	204	222	158	210	362	432
Resource	36	56	12	22	48	78
Speech/Language	3	1	33	36	36	37
CDC	6	3	12	3	18	6
School Psychologist	0	1	1	4	1	5
Gifted	2	2	1	0	3	2
Deaf/Hard of Hearing Teacher	1	1	4	0	5	1
Visually Limited	0	0	1	0	1	0
Total Special Education	252	286	222	275	474	561
Percent	36%	34%	24%	20%	29%	25%
<u>General Education</u>						
Consulting Teacher	1	9			1	9
At Risk, Alternative, Adult High	1	1	0	0	1	1
Guidance Counselor	9	2	0	0	9	2
Homebound	0	0	0	0	0	0
Title I Reading	1	0	0	0	1	0
Title I Mathematics	0	2	0	0	0	2
ESL (Native Language)	40	27	0	0	40	27
Elementary Grades	33	47	205	376	238	423
Mathematics	22	45	84	116	106	161
Social Studies	60	89	37	44	97	133

Area	1998-1999	1999-2000	1998-1999	1999-2000	Sum Waivers & Permits: 1998-1999	Sum Waivers & Permits: 1999-2000
Health & Physical Education, Drivers Ed, Lifetime Wellness	37	30	20	74	57	104
Science	21	33	52	67	73	100
Foreign Language	19	28	40	68	59	96
Music	18	30	34	47	52	77
English and Journalism	15	21	28	52	43	73
Librarian	61	57	15	12	76	69
Art	19	26	31	33	50	59
Kindergarten	3	11	13	35	16	46
Early Childhood	0	0	13	28	13	28
Drama/Theater Arts	8	13	0	8	8	21
Middle Grades	0	0	15	20	15	20
Pre-School/Early Childhood	27	14	0	0	27	14
ESL		0	11	9	11	9
Alternative School	0	0	3	9	3	9
Computer	0	0	6	7	6	7
Reading	0	0	2	5	2	5
GED	0	0	12	1	12	1
Adult Education	0	0	0	0	0	0
Title I Math	0	0	1	0	1	0
Theatre	0	0	7	0	7	0
Psychology	0	0	1	0	1	0
Non-Graded	0	0	1	0	1	0
Guidance	0	0	7	0	7	0
Total General Education	395	485	638	1011	1033	1496
Percent	57%	58%	70%	74%	64%	68%

Area	1998-1999	1999-2000	1998-1999	1999-2000	Sum Waivers & Permits: 1998-1999	Sum Waivers & Permits: 1999-2000
<u>Vocational Education</u>						
Trade & Industrial	2	21	21	25	23	46
Office Education	0	0	14	18	14	18
Health Occupations	0	11	5	4	5	15
Marketing	8	7	6	5	14	12
Family and Consumer Sciences	0	0	3	12	3	12
Technology Education	0	0	0	11	0	11
Agriculture	3	2	5	7	8	9
Industrial Arts, Technology Education	9	7	0	0	9	7
Other Vocational	3	6	0	0	3	6
VIP/VAP	0	5	0	0	0	5
Home Economics	5	0	0	0	5	0
Business/Office/Keyboarding/Computer and Typing	14	0	0	0	14	0
Job Training/Co-op	1	0	0	0	1	0
Total Vocational Education	45	59	54	82	99	141
Percent	6%	7%	6%	6%	6%	6%

<u>Other</u>						
School Social Worker	0	1	7	9	7	10
Principal	1	3	0	3	1	6
Other	0	0	0	2	0	2
Total	1	2	3	4	5	6
Percent	0%	0%	0%	0%	0%	0%
GRAND TOTAL	693	832	917	1372	1611	2204



 **DEFINITION:** The below table shows, when data permit—that is, when waiver and permit data can clearly be linked with a *position category*, then the total of waivers and permits as a percent of the number of educators in that area is calculated. Note this table uses 1998-99 waivers and permits to match the 1998-99 educator workforce data.

Table 70: Waivers and Permits as a Percent of Educators, Sorted by Greatest Percent of Waivers & Permits

Position	Number of Educators 1999	Waivers & Permits 1999	Waivers & Permits as a Percent of 1999 Educators
HS Foreign Language	516	59	11.4%
HS Social Studies	1025	97	9.5%
HS Mathematics	1369	106	7.7%
HS Language Arts	1013	73	7.2%
HS Science	1042	73	7.0%
Special Education	5804	362	6.2%
Librarians	1428	76	5.3%
Elementary Teachers	18951	238	1.3%
Guidance Counselors	1676	9	0.5%
Kindergarten Teachers	3725	16	0.4%
Middle School Teachers	5911	15	0.3%

 Note: Foreign language has the greatest percentage of waivers and permits. Social studies follows. Special education ranks after mathematics, language arts, and science. And while elementary has the greatest total number of waivers and permits after special education, its percentage at 1.3.

District Waivers and Permits

DEFINITION: The following sections examine districts in terms of access to supply measure by demand for waivers, permits, and how enrollment growth compares to educator workforce growth.

Note: Memphis accounts for 43.2 percent of the total of waivers and permits, while accounting for only 12.5 percent of the total educator workforce.

Note: 2 districts, Memphis and Davidson account for more than 50 percent of the total of waivers and permits issued.

Note: Out of the 139 districts, 114 requested waivers. Of those 114 districts, 53 asked for 5 or less waivers---17 asked for only a single waiver.

Note: 25 districts reported no waivers or permits in 1999-2000

Note See Appendix 8 for a complete list

Table 71: Highest ten and lowest districts percent permits and waivers in 1999-2000

District	Waivers	Permits	Waivers + Permits	Total Educators 1999	Waivers and Permits as a Percent of Total Workforce
BRADFORD SPECIAL	4	6	10	40	25.0%
MEMPHIS CITY	134	807	941	7147	13.2%
FAYETTE	6	21	27	325	8.3%
HARDEMAN	10	17	27	347	7.8%
GRUNDY	10	5	15	196	7.7%
TIPTON	22	21	43	563	7.6%
HICKMAN	6	10	16	226	7.1%
CHEATHAM	19	11	30	429	7.0%
POLK	8	3	11	169	6.5%
MARION	11	9	20	345	5.8%

State Total	820	1357	2177	62310	3.5%
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Districts with no requests for Waivers and Permits
ALCOA CITY , ATHENS CITY , BELLS CITY , BRADLEY, BRISTOL CITY , CARROLL , CLAY, ELIZABETHTON CITY , ETOWAH CITY , GIBSON SPEC DISTRICT, HANCOCK, HOLLOW ROCK-BRUCETON , HUNTINGDON SPECIAL , KINGSFORT CITY , LENOIR CITY , LEXINGTON CITY , MARYVILLE CITY , NEWPORT CITY , OBION, PARIS CITY SPECIAL , ROGERSVILLE CITY , SOUTH CARROLL SPECIAL , SWEETWATER CITY , UNION CITY , W CARROLL SPEC DISTRICT

Comparing Change in District Enrollment with Change in Educator Workforce


 Note: The district with the largest growth in total enrollments from 1995 to 1999 is Etowah at 38.2%. The greatest decline in enrollments is for Clinton with a decline of 18.8 percent. *See Appendix 9 for full listing.*

Table 72: Growth In Total Enrollments by District: Highest and Lowest

District	1991	1992	1993	1994	1995	1996	1997	1998	1999	1991-1995	1995-1999
ETOWAH	399	445	337	330	301	322	382	399	416	-25%	38.2%
MONTGOMERY	18,315	19,927	20,670	21,658	22,807	24,786	24,090	26,132	30,159	25%	32.2%
WILLIAMSON	11,925	12,554	12,653	14,968	14,817	17,003	18,008	18,435	19,295	24%	30.2%
LEBANON	2,528	2,477	2,539	2,560	2,612	2,828	2,837	2,752	3,178	3%	21.7%
MURFREESBORO	4,576	4,779	5,202	5,245	5,455	6,062	5,178	5,361	6,494	19%	19.0%
FRANKLIN	3,692	3,783	3,688	3,758	3,658	4,148	4,172	4,492	4,250	-1%	16.2%
PARIS	1,316	1,316	1,385	1,399	1,386	1,633	1,745	1,658	1,609	5%	16.1%
STEWART	1,659	1,741	1,745	1,817	1,923	1,957	2,056	2,105	2,222	16%	15.5%
SEVIER	9,534	9,723	10,375	10,487	10,982	12,127	12,658	12,355	12,649	15%	15.2%
RUTHERFORD	19,581	20,258	21,459	21,835	22,769	23,837	25,019	25,302	25,936	16%	13.9%
State	880,246	893,272	906,975	923,673	936,400	948,217	962,645	978,438	967,556	6%	3%
ALCOA	1,446	1,515	1,499	1,532	1,573	1,585	1,494	1,331	1,373	9%	-12.7%
HANCOCK	1,262	1,301	1,295	1,334	1,346	1,389	1,340	1,260	1,172	7%	-12.9%
COVINGTON	1,233	1,234	1,203	1,171	1,129	1,110	1,099	1,041	973	-8%	-13.8%
LAKE	1,180	1,246	1,265	1,234	1,222	1,190	1,168	1,093	1,053	4%	-13.8%
MARION	4,920	4,996	4,954	4,873	4,949	4,871	4,849	4,891	4,229	1%	-14.5%
ELIZABETHTON	2,468	2,633	2,628	2,547	2,586	2,575	2,450	2,312	2,206	5%	-14.7%
HARRIMAN	1,844	1,947	1,941	1,940	1,920	1,766	1,786	1,678	1,591	4%	-17.1%
FAYETTE	5,193	4,671	5,140	5,138	5,155	4,815	4,498	4,398	4,265	-1%	-17.3%
RICHARD CITY	262	289	295	336	381	390	349	338	310	45%	-18.6%
CLINTON	1,138	1,251	1,175	1,169	1,165	1,068	963	958	946	2%	-18.8%


Note: The district with the largest growth in total educators from 1995 to 1999 is Rutherford at 36.6%. The greatest decline in enrollments is for Clay with a decline of 18 percent. *See Appendix 10 for full listing*

Table 73: Growth In Total Educator Workforce by District: Highest and Lowest

District	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	1991-1995	1995-1999
RUTHERFORD	1,073	1,108	1,137	1,167	1,228	1,255	1,328	1,466	1,620	1,714	13%	36.6%
UNION	135	142	147	161	162	168	177	175	200	223	18%	32.7%
MONTGOMERY	962	1,023	1,018	1,106	1,189	1,240	1,313	1,419	1,482	1,567	21%	26.4%
JEFFERSON	339	345	337	348	346	351	376	386	416	436	2%	24.2%
MARSHALL	240	258	259	269	279	286	294	312	328	350	11%	22.4%
TROUSDALE	71	77	74	75	77	76	79	85	90	93	-1%	22.4%
WILSON	580	572	548	588	608	624	641	659	679	758	9%	21.5%
ROGERSVILLE CITY	35	34	39	39	41	42	44	45	42	51	24%	21.4%
SEVIER	563	580	597	610	643	668	702	723	767	808	15%	21.0%
LENOIR CITY	103	101	105	106	114	112	118	122	144	135	11%	20.5%

State	52,157	53,783	53,902	54,903	56,424	56,750	58,130	58,523	60,364	62,310	6%	10%
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OAK RIDGE CITY	355	366	372	367	379	392	396	377	387	370	7%	-6%
CROCKETT COUNTY	108	106	110	109	116	117	119	121	107	109	10%	-7%
GREENEVILLE CITY	213	228	223	223	228	224	217	213	207	208	-2%	-7%
HARRIMAN CITY	133	130	126	123	126	126	126	118	121	117	-3%	-7%
ALCOA CITY	111	103	107	110	118	114	113	102	99	105	11%	-8%
HANCOCK	97	105	108	111	113	116	119	113	109	105	10%	-9%
COVINGTON CITY	67	64	58	68	70	69	72	71	68	61	8%	-12%
LAKE	79	84	86	86	92	87	84	79	83	76	4%	-13%
FAYETTE	284	292	286	303	297	295	282	270	266	254	1%	-14%
CLAY	113	113	115	115	120	119	116	106	101	98	5%	-18%

 **DEFINITION:** The following table compares enrollment change (E) with the change in the educator workforce (W). The following districts showed the greatest disparity between enrollment growth and workforce growth. The districts with a ratio of greater than 1 indicate that enrollment growth is outpacing workforce growth, and thus, the student to educator ratio will be increasing. Conversely, if the ratio is less than 1, then the workforce growth will be outpacing the enrollment growth, and the student to educator ratio should be falling or improving.

For example, the ratio E/W, for Etowah, for example was 1.38 /1.07=1.29, or 38 percent enrollment growth (1.38) divided by a 7 percent increase in educators (1.07). A larger the ratio indicates a greater discrepancy between enrollment growth and workforce growth. This indicator suggests possible problems of supply keeping pace with demand. See Appendix 11 for the full listing of these ratios.

Table 74: Districts ranked by Enrollment Growth related to Workforce Growth, 1995 to 1999

District	Enrollment 1999	Enrollment Growth 1995-1999	Workforce 1999	Workforce Growth 1995-1999	Ratio E/W
ETOWAH	416	38%	31	7%	1.29
SOUTH CARROLL	437	10%	26	-4%	1.14
KINGSPORT	6853	9%	439	-4%	1.13
CLAY	1252	-7%	98	-18%	1.13
CROCKETT	1866	3%	109	-7%	1.11
WILLIAMSON	19295	30%	1140	20%	1.09
HICKMAN	3738	11%	226	2%	1.08
LEBANON	3178	22%	203	14%	1.07
MORGAN	3721	9%	239	3%	1.06
MOORE	1093	2%	63	-3%	1.06


State Total		3%		10%	0.96
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BLOUNT	11354	0%	685	18%	0.85
SCOTT	2990	-8%	232	9%	0.84
RUTHERFORD	25936	14%	1714	37%	0.83
CLINTON	946	-19%	84	-2%	0.83
LAUDERDALE	5135	-10%	353	9%	0.83
ELIZABETHTON	2206	-15%	169	4%	0.82
LEXINGTON	898	-4%	61	17%	0.82
BELLS	363	-4%	27	17%	0.81
ROGERSVILLE	648	-4%	51	21%	0.79
UNION	3045	3%	223	33%	0.78

The analysis of supply and demand conditions by district shows considerable diversity among districts in facing changing enrollments and their capability to obtain adequate supply to meet the demand of those changing enrollments.

The Influence of the Aging Workforce on Educator Supply

A current concern is the aging of the workforce. Given that a large portion of the workforce is composed of “baby boomers” and they are aging---will the educator workforce suffer large losses in the years ahead? To attempt to answer that question a simulation of the workforce aging, and its impact on attrition was conducted.

 Note: A simulation was run to observe how the aging of the workforce would influence the number of educators over time. “Aging” is tracked with the experience level, as it is a more reliable source of data in Tennessee than age.

The assumptions are:

1. 1998-99 attrition rates by cohorts remain the same (not number, but rates), and
2. The entry number, by experience as shown in the historical data from 1998-99, will remain the same to replace exiting educators.
3. We hold enrollments at the 1998-99 level--to see if the influence of aging alone will cause problems.

Figure 5 shows that in the recent historical period, *there is an increase in educators for experience levels of both 20+ and 0-10*. In the simulated period, as we allow educators to age, and new educators to enter, both of those groups grow, squeezing the 11-19-experience group as the baby boomers make their way into the 20+ group. *Note that then 0-10 group, that is “new” teachers more than replaces the shrinking of the 11-19 Group*

Historically, there was strong showing of entrants in 1998-99, the total of new entrants and reentrants exceeding 5,700 persons. This group of entrants (composed of entrants with no experience, and reentrants) ranged in experience from zero (new entrants) to over 40 years. If we assume that this level of entrants is available in each of the simulated years, the workforce easily grows in size to 2010. *Note, however, this is a very large number of hires and it is uncertain whether such a numbers could be available for hire.*


 Note: Simulations were run to test the influence of reducing the total number of entrants. Only if the 5,700 entrants are reduced by 20 percent, or to the level of 4,600 educators---*and the level of entry stays at 4,600 over the simulation period*---do we see the total workforce begin to decline by 2010. Lowering the number of entrants below 4,600 (assuming the experience levels are distributed per the last historical year) makes the total workforce figures continue to fall. As table 75 shows, it is possible for entrants to fall below 4,600. However, that has not happened since 1994.

Table 75: Entrant

Year	Number of Entrants
1990	3,022
1991	3,259
1992	2,999
1993	5,141
1994	4,451
1995	4,856
1996	4,728
1997	4,918
1998	5,512
1999	5,784

In other words, given assumptions 1-3 above it seems likely that no “dramatic” change in supply is likely to be observed over the period of concern even with increasing enrollments---unless entrants (that is re-entrants and entrants) somehow drops by 20 percent from the most recent levels and remain at that low level for 5 years in a row. *The key then to stable supply is the ability to enlist sufficient hires at recent historical levels.*

Note: Figure 5 shows how the “bulge of baby boomers” makes its way through the workforce and decreases in total numbers due to attrition. By the year 2005 their numbers have dropped considerably, and by 2010 there is really little evidence of that group (the eldest would be 63, the youngest 50 years of age). This can be seen in the solid red line below.

Figure 5: Simulated Total Educator Workforce 1989 to 2010

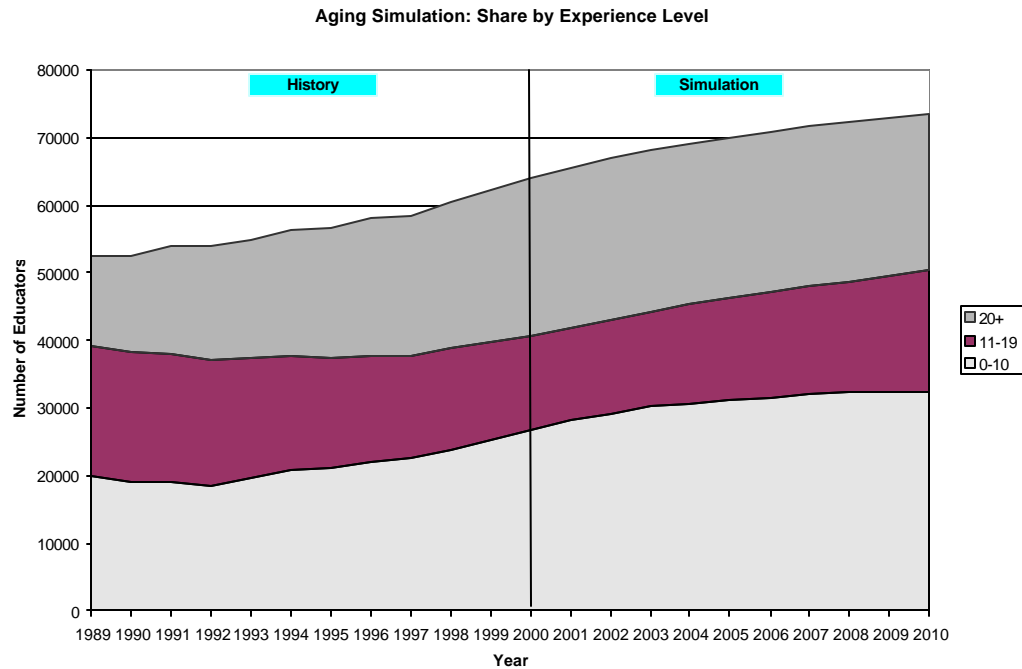
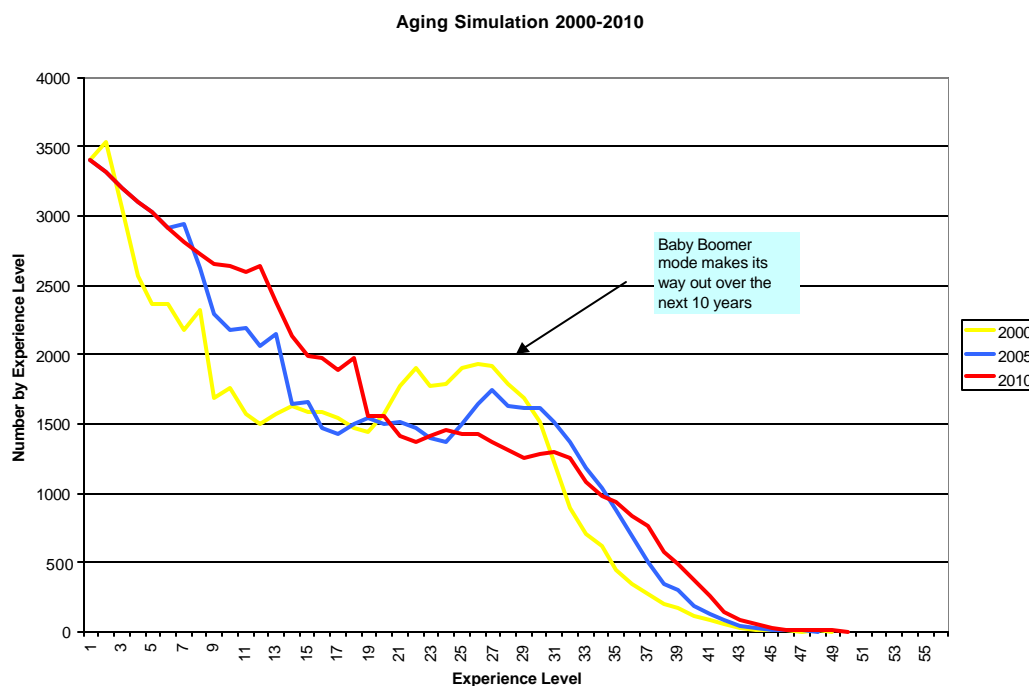



Figure 6 Simulated Experience Profiles of Tennessee Educators 1989 to 2010



Analysis of Supply and Demand Conditions

 **Note:** Tennessee will face some challenges in keeping the supply in balance with the demand for educators in order to meet its EIA standards for student to teacher ratios. As discussed, there are numerous factors influencing supply and demand: the change in enrollments, the aging of the workforce, the size of the reserve pool, and the number of licensure candidates produced by Tennessee IHEs. These conditions are measured by the degree to which standards for student to teacher ratio are met. We will examine each of these in turn.

Grade Levels of Concern

Indicators	Kindergarten	Area of Concern?
Total Enrollments	Total enrollments increase from 75,968 students in 1999 to 83,694 projected in 2004. From 1995-1999 there was a 1 percent decrease in enrollments, while from 2000-2004 there is a 6 percent projected increase.	Yes , enrollments are increasing more rapidly in projection period.
District Enrollments	68 percent of districts are predicted to show an increase in the number enrollments from 2000 to 2004.	Yes , more districts are predicted to grow in kindergarten enrollments in the projection period.
District Demand for Educators	68 percent of districts are predicted to show an increase in the number educators from 2000 to 2004.	Yes —as demand follows enrollment change.
Student to Educator Ratio	21 percent of districts have not met the EIA standard of 20 students per teacher. This is a substantial improvement from 1996-97 when 41 percent of districts did not meet the standard.	Yes , there are still more than 1/5 of the districts not meeting the standard.
Aging	Experience levels for kindergarten teachers show average experience levels at 13 years.	No , these are among the youngest teachers.
Reserve Pool	K-8 Early Grade Specialists=4,907; Pre-Kindergarten-Grade 3=1,491:	No : In 1998-1999 there were 7,671 endorsements for 3,735 positions—more than 2 to 1
Waivers and Permits	46 Kindergarten, 28 Early Childhood, 14 Pre-School/Early Childhood	No -waivers and permits represent less than 1 percent of kindergarten positions.
IHE Majors	For Public IHEs, since 1990, elementary and early childhood has produced 917 persons seeking first time licensure, of which 67 percent have been hired over that period. The average percent entry among all majors over this period was 56 percent.	Maybe —this is a higher than average yield.
Live Births	Sharp increase over the past years	Yes , more live births mean more kindergarten enrollments to come.
Bottom Line	There will be sustained growth in kindergarten over the next 5 years, and that growth rate will increase. Live birth rates have greatly increased. However, not all districts will experience such changes. Of concern that more than 1 in 5 districts are not meeting the EIA standard.	Yes

Indicators	Elementary (1-4)	Area of Concern?
Total Enrollments	Total enrollments increase from 314,708 students in 1999 to 335,502 projected in 2004. From 1995-1999 there was a 6 percent increase in enrollments, and from 2000-2004 there is, similarly, a 6 percent projected increase.	Maybe —the projected growth is the same rate as historical growth
District Enrollments	79 percent of districts are predicted to show an increase in the number enrollments from 2000 to 2004.	Yes —more districts will feel increased demand than in the historical period.
District Demand for Educators	79 percent of districts are predicted to show an increase in the number educators from 2000 to 2004.	Yes —demand follows enrollment growth.
Student to Educator Ratio	9 percent of districts do not meet the EIA standard of 20 students per teacher. This has been a substantial improvement since 1996-97 where 17 percent of districts did not meet the standard	Maybe ---this is still 1 out of 11 not reaching the standard, but historical improvement has been excellent.
Aging	Experience levels for elementary teachers show average experience levels at 14 years.	No
Reserve Pool	16,138 endorsements (of which 6398 could apply to kindergarten, and 8521 could apply to middle school and junior high school)	No —large number of endorsements.
Waivers and Permits	423 waivers and permits	No —large number in that there are many students. However, the concern is how well urban areas can attract supply.
IHE Majors	For Public IHEs, since 1990, elementary and early childhood has produced 3,556 persons seeking first time licensure, of which 66 percent have been hired over that period. The average percent entry among all majors over this period was 56 percent.	Maybe —a larger than average yield.
Bottom Line	Over the past 5 years elementary enrollments grew at the rate of 6 percent. Enrollments will do the same in the next 5 years. While 1 in 11 districts has not meet the EIA standards, districts have greatly improved in over the past 3 years. Further, many districts are more than meeting the Standards, with the average student-to-teacher ratio being 16.7. There will be more districts facing increased demand in the projected period than in the historical period. However, if history repeats itself there should not be a problem in this grade range. What is of greater concern is how the growing number in live births translates into elementary enrollments post 2004.	No

Indicators	Middle School (5-6)	Area of Concern?
Total Enrollments	Total enrollments increase from 145,928 students in 1999 to 156,279 projected in 2004. From 1995-1999 there was a 3 percent increase in enrollments, while from 2000-2004 there is a 4 percent increase projected.	Maybe —a minor increase of the historical period
District Enrollments	72 percent of districts are predicted to show an increase in the number enrollments from 2000 to 2004.	Yes --- more districts show increases than in the historical period.
District Demand for Educators	72 percent of districts are predicted to show an increase in the number educators from 2000 to 2004.	Yes —demand follows enrollment growth.
Student to Educator Ratio	6 percent of districts did not meet the EIA standard of 25 students per teacher	Maybe ---1 in 16 districts do not meet the standards.
Aging	Experience levels for middle school teachers show average experience levels at 14 years.	No
Reserve Pool	13,428 endorsements shared among grades K through 9.	Maybe —it depends on how elementary and kindergarten draw from this pool.
Waivers and Permits	20 waivers and permits	No
IHE Majors	Public IHE majors in that provide the most entrants for middle school are elementary (66 percent entry rate), multi-interdisciplinary (72 percent entry rate), and no major (46 percent entry rate).	Maybe —again, middle school shares its pool of entrants with elementary and other areas
Bottom Line	Here, again, as in elementary, history seems ready to repeat itself. In the future, enrollments will increase by roughly the same percent as they have over the historical period. Only 1 in 16 districts do not meet the EIA standards. There were only 20 waivers and permits recorded in this area.	No

Indicators	Junior High School (7-8)	Area of Concern?
Total Enrollments	Total enrollments increase from 147,187 students in 1999 to 164,105 projected in 2004. From 1995-1999 there was a 1 percent increase in enrollments, while from 2000-2004 there is a substantial 11 percent projected increase.	Yes ---there is a substantial increase in enrollments in the projection period.
District Enrollments	80 percent of districts are predicted to show an increase in the number enrollments from 2000 to 2004.	Yes
District Demand for Educators	78 percent of districts are predicted to show an increase in the number educators from 2000 to 2004.	Yes —demand follows enrollment growth.
Student to Educator Ratio	100 percent of districts meet standard	No
Aging	Experience levels for Junior high school teachers show average experience levels at 14 years.	No
Reserve Pool	13,428 endorsements shared among grades K through 9 and all the high school academic endorsements.	Maybe —junior high school shares endorsements with kindergarten, elementary, and middle school
Waivers and Permits	<i>Not specified by the data collected</i>	
IHE Majors	Public IHE majors that provide the most entrants for jr. high school are elementary (66 percent entry rate), multi-interdisciplinary (72 percent entry rate), no major (46 percent entry rate) and secondary (56 percent entry rate).	Maybe —junior high school shares its pool with kindergarten, elementary, and middle school
Bottom Line	Enrollment growth increase dramatically relative to the recent historical change in enrollments. Historically large elementary and middle school enrollments make their way into junior high school during the projection period. Further, 80 percent of districts are projected to experience this enrollment increase. Historically, 100 percent of the districts have met the EIA Standard. The average student to teacher ratio is 26.2 relative to Standard of 30. However, with any large change in enrollments---there must be concern.	Yes


Indicators	High School (9-12)	Area of Concern?
Total Enrollments	Total enrollments increase from 268,089 students in 1999 to 287,739 projected in 2004. From 1995-1999 there was a 4 percent increase in enrollments, while from 2000-2004 there is a 6 percent increase.	Maybe —historical and projected growth are similar
District Enrollments	60 percent of districts are predicted to show an increase in the number enrollments from 2000 to 2004.	Maybe —more increase, but at lesser rates than earlier grades
District Demand for Educators	60 percent of districts are predicted to show an increase in the number educators from 2000 to 2004.	Maybe —demand follows enrollment growth.
Student to Educator Ratio	Among subject areas, the worse case shows only 3 percent not meeting the EIA standard of 30 students per teacher (Foreign languages).	No —though this varies by area, notably foreign languages.
Aging	Experience levels among high school teachers varies by subject with language arts that average 16 years of experience, to science and foreign language teachers who average 14 years of experience.	No
Reserve Pool	14,405 over sundry categories: Math (1065), Science (1889), Social Science (3209, with 1,246 shared with Junior HS), Trade & Industry (598),	Maybe : math, which has the lowest reserve pool among high school endorsement areas with 1065 endorsements for 1369 positions existing and filled positions. The 1065 endorsements translates to potentially more than 650 people, currently unemployed, who may be available to fill jobs additional job openings when they emerge
Waivers and Permits	1,096 over sundry categories: Mathematics (161), Social Studies (133), Health & Physical Education (104), Science (100), Foreign Language (96), Music (77), English (73), Art (59), Trade & Industrial (46), Drama/Theatre Arts (21), etc.	Yes , waivers for foreign language are at 11.5 percent of foreign language teachers, social studies at 9.5 percent those teachers, and 7.7 percent of math teachers
IHE Majors	Public IHE majors in entrants for high school vary by subject area.	No —the source of supply from the primary areas show lower than average yields.
Bottom Line	Enrollments increased by 4 percent over the historical period, and are projected to increase by 6 percent in the projected period---largely repeating what history produced. In high school, the concern focuses on specific areas, notably foreign languages, social studies, and math teachers where waivers and permits are a high percentage of total positions.	Yes : for foreign languages, social studies, and math teachers.

Indicators	Special Education	Area of Concern?
Total Enrollments	Total enrollments increase from 17,033 students in 1999 to 17,373 projected in 2004. From 1995-1999 there was a 14 percent decrease in enrollments, while from 2000-2004 there is a 6 percent increase projected.	Yes: if special education enrollments increase as a percentage of total enrollments, the future portends more special education enrollments than historical rates have shown.
District Enrollments	74 percent of districts are predicted to show an increase in the number enrollments from 2000 to 2004.	Yes
District Demand for Educators	74 percent of districts are predicted to show an increase in the number educators from 2000 to 2004.	Yes
Student to Educator Ratio	Not Applicable	No EIA standard
Aging	Special education show average experience levels at 12 years.	No
Reserve Pool	3,529 endorsements---with low areas in Visually impaired (12), Deaf K-12 (18), Vision Pre K-12 (19), and Hearing Pre-K-12 (46)	Yes: specifically in some areas.
Waivers and Permits	602 waivers and permits for Special Education as an area.	Yes: large number of waivers and permits
IHE Majors	Public IHE majors in special education major enter at the rate of 61 percent.	Yes: higher rate than average.
Bottom Line	Special education demand is difficult to estimate. However data on supply shows particular areas in special education are quite low, and that waivers and permits relative to positions is quite high.	Yes: particularly for visually impaired, and deaf-hearing impaired.

Indicators	Administrator	Area of Concern
Total Enrollments	Changes in administrators follow the changes in total enrollments. Total enrollments increase from 967,556 students in 1999 to 1,043,659 projected in 2004. From 1995-1999 there was a 3 percent increase in enrollments, while from 2000-2004 there is a 6 percent increase projected.	Yes: administrator demand increases with total enrollment, which is increasing.
District Enrollments	86 percent of districts are predicted to show an increase in the number enrollments from 2000 to 2004.	Yes: a large majority of districts show increasing enrollments.
District Demand for Educators	86 percent of districts are predicted to show an increase in the number educators from 2000 to 2004.	Yes —demand follows enrollment growth.
Student to Educator Ratio	Not Applicable	Not Applicable
Aging	Administrators have the highest levels of experience ranging from 30 years for assistant superintendents to 18 years for assistant elementary and secondary principals.	Maybe: highest age group, but draws from large and growing pool of younger teachers
Reserve Pool	57 endorsements	No: draws from teachers already hired in system
Waivers and Permits	6 waivers and permits for Principals, 2 for Other	No
IHE Majors	Most of administrator supply comes from changing of positions, re-entrants, and virtually no new entrants.	No: draws from teachers already hired in system
Bottom Line	Administrator demand is estimated as a percent of total enrollments by district. Given that the supply of administrators comes, largely, from employed educators, it	No. However, anecdotal evidence suggests that there is a shortage of individuals who seek administrative positions.

Indicators	Staff	Area of Concern
Total Enrollments	Changes in staff follow the changes in total enrollments. Total enrollments increase from 967,556 students in 1999 to 1,043,659 projected in 2004. From 1995-1999 there was a 3 percent increase in enrollments, while from 2000-2004 there is a 6 percent increase projected.	Yes: staff demand increases with total enrollment, which is increasing.
District Enrollments	86 percent of districts are predicted to show an increase in the number enrollments from 2000 to 2004.	Yes: a large percentage of districts have increasing enrollments
District Demand for Educators	85 percent of districts are predicted to show an increase in the number educators from 2000 to 2004.	Yes: —demand follows enrollment growth.
Student to Educator Ratio	Not Applicable	Not applicable
Aging	Experience levels range from 20 years for librarians to 17 years for the category of Other Professional Staff.	Yes: depending on the position.
Reserve Pool	Counselors (410), Librarians (237), School Psychologist (205), Social Worker (39)	Yes: Librarians have the very lows levels in their reserve pool, followed by counselors, social workers (39 endorsements) and psychologists (205 endorsements)
Waivers and Permits	10 waivers and permits for School Social Worker, 69 for Librarians	Maybe: waivers and permits represent around 5 percent of librarian positions, and less than 1 percent of counselor positions (because law prohibits it).
IHE Majors	Staff was formerly drawn from a range of majors, now must complete graduate level programs.	No: staff draws from those IHE majors that have the largest number of graduates—elementary, Multidisciplinary, and “No Majors”
Bottom Line	From the endorsement data on the reserve pool, and data on waivers and permits there may be problems with the obtaining an adequate supply of librarians and counselors.	Yes: for a number of staff notably librarians, counselors, social workers, and psychologists.

Subject Areas of Concern

 Note: After examining changes in enrollments and the size of the reserve pool by subject, the following concerns emerge:

Special Education: particularly the areas of visually impaired, deaf and hearing impaired. These areas have low numbers in the reserve pool and special education has a very large number of waivers and permits.

Elementary: There are potential shortages in selected geographic areas. There have been a large number of persons trained to teach elementary grades---larger than any other grade group. Educators trained as elementary teachers have the highest yields out of the IHEs (66%). There is a large number of educators in the reserve pool of trained to teach elementary grades. Yet, there are a large number of waivers and permits for elementary (outdone only by special education). However, this number is a relatively small percent of the total positions in elementary (only 1.3 percent). This argues for a very regionalized or segmented reserve pool for elementary teachers.

Foreign Languages: Waivers and permits as a percent of a position total workforce are highest for foreign language teachers, and the reserve pool estimates show low numbers for all languages except Spanish and French.


Librarians: this group shows a small reserve pool and waivers and permits for more than 5 percent of the librarian workforce.


Guidance Counselors: Low reserve pool.


ESL: Large number of waivers and permits (40 in 1998-99, and 27 in 1999-2000), low numbers in the reserve pool (83 endorsements).

Math and Science: Large number of waivers and permits.

Social Studies: Large number of waivers and permits relative to the number of positions (the second largest percent at 9.5 percent). However there is a reserve pool of 3,209 endorsements. Again this argues for a very regionalized or segmented reserve pool for social studies teachers.

 Note: Again, these conditions will be exacerbated when such subjects are in junior high schools (given the large projected increase in enrollments) and high school (given a somewhat larger increases in growth in enrollments from historical levels).

 Note: However, all of these concerns should be kept in perspective. Of the more than 62,000 educators in the system in 1998-1999, there were 693 waivers and 921 permits or about 2.6 percent of the total workforce. *That is, more than 97 percent of the positions are filled with appropriately endorsed educators.*

 Note: Further, EIA standards are being met in the great majority of cases among all grade levels. With regard to EIA standards, there is a statewide surplus of teachers in all areas with standards except for kindergarten. *Please note, that certain districts, however, still have not met the standards and thus are facing problems with obtaining adequate supply.*

Conclusion

BOTTOM LINE IN TERMS OF SUPPLY AND DEMAND

- The supply of teachers is quite regional within the state linked closely to the geographical location of the institute of higher education.
- Institutes of higher education have been quite successful in increasing the supply of black candidates for teaching in Tennessee public education.
- Districts attempting to meet the EIA standards are meeting them more than adequately. Continued improvement is needed in kindergarten, and there is some small recent slippage in foreign languages and math student to teacher ratios.
- Recent increases in live births indicate that kindergarten enrollments will begin to increase in the projection period and beyond.
- Growth in enrollments will occur at all grade levels with the greatest growth occurring in junior high school grades. All subject areas in those grades are vulnerable to potential supply shortages.
- Subject areas of special education, foreign languages are of concern. Math and science show large numbers of waivers.
- The areas of elementary and social studies are of concern in urban areas.
- Staff areas of librarians and counselors are of concern.

Appendices

Appendix 1: State of Tennessee: Position Code to Tennessee Position Crosswalk

Code	Position Description	Tennessee Position Code	Tennessee Position Name
ADMINISTRATORS			
110	Superintendents	10	Superintendent
115	Assistant Superintendents	11	Asst. Superintendent
121	Elementary Principals	03	Principal (Elem.)
123	Secondary Principals	04	Principal (Sec)
124	Elem. & Sec. Principals	05	Principal (Elem. & Sec)
126	Asst. Elem. Principals	06	Asst. Principal (Elem.)
128	Asst. Sec. Principals	07	Asst. Principal (Sec)
129	Asst. Elem. & Sec. Principals	08	Asst. Principal (Elem. & Sec)
190	Other Administrative	74	Spec Ed Principal
		19	Principal & Superintendent
		63	Vocational Principal
PROFESSIONAL STAFF			
210	Guidance Counselors	40	Guidance Counselor (Elem.)
		41	Guidance Counselor (Sec)
		42	Guidance Counselor (Elem. & Sec)
220	Librarians	28	Librarian (Elem. & Sec)
		31	Librarian (Elem.)
		32	Librarian (Sec)
280	Supervisors	16	Supv of Instruction (Sec)
		17	Supv of Instruction (Elem.)
		20	Supv of Inst. (Elem. & Sec)
		21	Materials Supervisor
		23	School Food Service Supervisor
		24	Special Education Supervisor
		75	Spec Ed Supervisor
		25	Vocational Supervisor
		62	Vocational Supervisor
		92	Chapter 1 Supervisor
290	Other Professional Staff	72	Spec Ed Related Ser, Prof. Pers
		73	Spec Ed School Psychologist
		29	Other System Wide (NCL)
		30	Other System Wide (CL)
		18	Attendance Teacher
		22	School Psychologist
		26	School Social Worker
		76	Speech/Hearing Specialist
		77	Audiologist
		33	Assessment Personnel
		34	Assessment Personnel

(Continued)

State of Tennessee
Position Code to Tennessee Position Crosswalk
(Continued)

Code	Position Description	Tennessee Position Code	Tennessee Position Name
TEACHERS			
310	Special Education	46	Learning Disabilities
		47	SMR
		50	Home Instruction
		51	Hospital Instruction
		52	Multiple Disabilities
		53	Speech & Hearing
		54	Severe Speech & Hearing
		55	Severe Hard of Hearing
		56	Visually Handicapped
		57	EMR
		58	Experimental Spec Ed
		59	Emotionally Disturbed
		68	Spec Ed Teacher (Elem.)
		69	Spec Ed Teacher (Sec)
		70	Spec Ed Teacher (OPTS 7,8,9)
		71	Home/Hospital Instruction
400	Early Childhood Education	79	Pre-K Teacher
500	Kindergarten Teachers	80	Kindergarten Teacher
		00	Kindergarten
600	Elementary Teachers	01	Elementary Teacher
		27	Music Teacher (Elem.)
		36	Art Teacher (Elem.)
		37	Phys Ed Teacher (Elem.)
		81	Grade 1 Teacher
		82	Grade 2 Teacher
		83	Grade 3 Teacher
		84	Grade 4 Teacher
		90	Chapter 1 Teacher (Elem.)
		64	Vocational Teacher (Elem.)
700	Middle School Teachers	85	Grade 5 Teacher
		86	Grade 6 Teacher
800	Jr. High School Teachers	87	Grade 7 Teacher
		88	Grade 8 Teacher
900	Total High School Teachers	02	High School Teacher
		89	Grade 9-12 Teacher
		91	Chapter 1 Teacher (Sec)
980	High School - Vocational Ed.	60	Vocational Teacher
		61	Vocational Teacher (TSC)
999	High School - Other Teacher	99	Unknown

State of Tennessee
Position Code to Tennessee Position Crosswalk
(Continued)

The High School grouping (900 series above) are then split into the categories shown below using the assignment data from the preliminary report. Please refer to Appendix B for a description of the processing steps used.

Code	Position Description
905	High School - Business
915	High School - Language Arts
930	High School - Social Studies
940	High School - Foreign Languages
960	High School - Mathematics
970	High School - Science

Appendix 2: Districts by Percent Black

District	Black	Grand Total	Percent Black
Grand Total	6997	62266	11%
ALAMO CITY	4	44	9%
ALCOA CITY	11	105	10%
ANDERSON	5	550	1%
ATHENS CITY	5	125	4%
BEDFORD	18	395	5%
BELLS CITY	2	27	7%
BENTON		187	0%
BLEDSON	1	127	1%
BLOUNT	7	685	1%
BRADFORD SPECIAL	1	40	3%
BRADLEY	5	598	1%
BRISTOL CITY	6	269	2%
CAMPBELL	1	473	0%
CANNON	1	156	1%
CARTER	2	507	0%
CHEATHAM	6	429	1%
CHESTER	8	169	5%
CLAIBORNE	4	400	1%
CLAY	3	98	3%
CLEVELAND CITY	21	340	6%
CLINTON CITY		84	0%
COCKE	2	317	1%
COFFEE	4	298	1%
COVINGTON CITY	12	61	20%
CROCKETT COUNTY	8	109	7%
CUMBERLAND	1	415	0%
DAYTON CITY		41	0%
DECATUR	2	147	1%
DEKALB		184	0%
DICKSON	13	508	3%
DYER	9	219	4%
DYERSBURG CITY	19	222	9%
ELIZABETHTON CITY	1	169	1%
ETOWAH CITY		31	0%
FAYETTE	110	254	43%
FAYETTEVILLE CITY	8	71	11%
FENTRESS	1	181	1%
FRANKLIN CITY	22	325	7%
FRANKLIN	15	415	4%
GIBSON SPEC DISTRICT	3	142	2%
GILES	16	326	5%
GRAINGER		216	0%
GREENE	1	491	0%
GREENEVILLE CITY	4	208	2%
GRUNDY		196	0%

District	Black	Grand Total	Percent Black
Grand Total	6997	62266	11%
HAMBLEEN COUNTY	17	681	2%
HAMILTON	398	2789	14%
HANCOCK	2	105	2%
HARDEMAN	71	347	20%
HARDIN	5	289	2%
HARRIMAN CITY	4	117	3%
HAWKINS	4	517	1%
HAYWOOD	60	314	19%
HENDERSON	6	235	3%
HENRY	8	219	4%
HICKMAN	5	226	2%
HOLLOW ROCK-BRUCETONS	3	56	5%
HOUSTON	2	94	2%
HUMBOLDT CITY	29	157	18%
HUMPHREYS	4	223	2%
HUNTINGDON SPECIAL	5	96	5%
JACKSON		125	0%
JEFFERSON	5	436	1%
JOHNSON CITY	19	475	4%
JOHNSON		179	0%
KINGSPORT CITY	11	439	3%
KNOX	272	4161	7%
LAKE	4	76	5%
LAUDERDALE	35	353	10%
LAWRENCE	2	476	0%
LEBANON CITY	12	203	6%
LENOIR CITY	1	135	1%
LEWIS	3	132	2%
LEXINGTON CITY	2	61	3%
LINCOLN	6	316	2%
LOUDON	3	296	1%
MACON	1	241	0%
MADISON	229	1064	22%
MANCHESTER CITY	1	94	1%
MARION	11	322	3%
MARSHALL	18	350	5%
MARYVILLE CITY	4	300	1%
MAURY	57	839	7%
MCKENZIE SPECIAL	1	91	1%
MCMINN	6	366	2%
MCNAIRY	10	279	4%
MEIGS		113	0%
MEMPHIS CITY	3205	7147	45%
MILAN CITY SPECIAL	11	167	7%
MONROE	4	311	1%
MONTGOMERYSCHS	104	1567	7%

District	Black	Grand Total	Percent Black
Grand Total	6997	62266	11%
MOORE	2	63	3%
MORGAN		239	0%
MURFREESBORO CITY	45	417	11%
DAVIDSON	1121	5153	22%
NEWPORT CITY		54	0%
OAK RIDGE CITY	24	370	6%
OBION	6	302	2%
ONEIDA CITY		84	0%
OVERTON	1	225	0%
PARIS CITY SPECIAL	4	97	4%
PERRY	1	98	1%
PICKETT		70	0%
POLK		169	0%
PUTNAM	6	652	1%
RHEA	4	267	1%
ROANE		437	0%
ROBERTSON	48	685	7%
ROGERSVILLE CITY		51	0%
RUTHERFORD	81	1714	5%
SCOTT	1	232	0%
SEQUATCHIE		133	0%
SEVIER	1	808	0%
SHELBY	380	2652	14%
SMITH	1	186	1%
SOUTH CARROLL SPECIAL		26	0%
STEWART		128	0%
SULLIVAN	2	961	0%
SUMNER	38	1513	3%
SWEETWATER CITY	3	83	4%
TIPTON	84	563	15%
TRENTON CITY	12	95	13%
TROUSDALE	2	93	2%
TULLAHOMA CITY	4	247	2%
UNICOI	2	181	1%
UNION CITY	6	120	5%
UNION	2	223	1%
VAN BUREN		69	0%
W CARROLL SPEC DISTRICT	7	83	8%
WARREN	3	464	1%
WASHINGTON	8	596	1%
WAYNE	1	221	0%
WEAKLEY	10	365	3%
WHITE	3	246	1%
WILLIAMSON	36	1140	3%
WILSON	26	758	3%
Grand Total	6997	62266	11%

Appendix 3: Districts by Percent Level of Educator Education

DISTRICT	Masters	Doctorate	Grand Total	Percent MA or Higher
Grand Total	32913	801	62266	54%
ALAMO CITY	11		44	25%
ALCOA CITY	71	9	105	76%
ANDERSON	319	3	550	59%
ATHENS CITY	83	1	125	67%
BEDFORD	190		395	48%
BELLS CITY	7		27	26%
BENTON	90		187	48%
BLEDSON	48	1	127	39%
BLOUNT	438	7	685	65%
BRADFORD SPECIAL	27		40	68%
BRADLEY	285	1	598	48%
BRISTOL CITY	147	5	269	57%
CAMPBELL	272	2	473	58%
CANNON	54		156	35%
CARTER	179	5	507	36%
CHEATHAM	182	3	429	43%
CHESTER	91	2	169	55%
CLAIBORNE	240	4	400	61%
CLAY	49		98	50%
CLEVELAND CITY	190	7	340	58%
CLINTON CITY	41	1	84	50%
COCKE	158		317	50%
COFFEE	136	5	298	47%
COVINGTON CITY	33		61	54%
CROCKETT COUNTY	42		109	39%
CUMBERLAND	193	4	415	47%
DAYTON CITY	17		41	41%
DECATUR	73	1	147	50%
DEKALB	81		184	44%
DICKSON	244	5	508	49%
DYER	100	2	219	47%
DYERSBURG CITY	130	1	222	59%
ELIZABETHTON CITY	82	4	169	51%
ETOWAH CITY	19	1	31	65%
FAYETTE	102	3	254	41%
FAYETTEVILLE CITY	40	2	71	59%
FENTRESS	111	2	181	62%
FRANKLIN CITY	168	2	325	52%
FRANKLIN	218	4	415	53%
GIBSON SPEC DISTRICT	63	1	142	45%
GILES	199	2	326	62%
GRAINGER	118		216	55%
GREENE	233	3	491	48%
GREENEVILLE CITY	122	3	208	60%
GRUNDY	88		196	45%

DISTRICT	Masters	Doctorate	Grand Total	Percent MA or Higher
Grand Total	32913	801	62266	54%
HAMBLEEN COUNTY	343	6	681	51%
HAMILTON	1530	29	2789	56%
HANCOCK	65	1	105	63%
HARDEMAN	162	3	347	48%
HARDIN	156		289	54%
HARRIMAN CITY	75	1	117	65%
HAWKINS	273	6	517	54%
HAYWOOD	139	3	314	45%
HENDERSON	111	1	235	48%
HENRY	127	1	219	58%
HICKMAN	97	2	226	44%
HOLLOW ROCK-BRUCETONS	21		56	38%
HOUSTON	37		94	39%
HUMBOLDT CITY	63	1	157	41%
HUMPHREYS	113	1	223	51%
HUNTINGDON SPECIAL	55		96	57%
JACKSON	58		125	46%
JEFFERSON	274	1	436	63%
JOHNSON CITY	279	14	475	62%
JOHNSON	84	2	179	48%
KINGSPORT CITY	278	8	439	65%
KNOX	2104	59	4161	52%
LAKE	23		76	30%
LAUDERDALE	116	3	353	34%
LAWRENCE	287	2	476	61%
LEBANON CITY	92		203	45%
LENOIR CITY	89	3	135	68%
LEWIS	57		132	43%
LEXINGTON CITY	38		61	62%
LINCOLN	158	2	316	51%
LOUDON	191	1	296	65%
MACON	119	1	241	50%
MADISON	666	13	1064	64%
MANCHESTER CITY	56	1	94	61%
MARION	168	1	322	52%
MARSHALL	170	3	350	49%
MARYVILLE CITY	224	7	300	77%
MAURY	457	8	839	55%
MCKENZIE SPECIAL	44	1	91	49%
MCMINN	248	4	366	69%
MCNAIRY	127		279	46%
MEIGS	53		113	47%
MEMPHIS CITY	3774	117	7147	54%
MILAN CITY SPECIAL	67	1	167	41%
MONROE	164	2	311	53%
MONTGOMERYSCHS	774	8	1567	50%

DISTRICT	Masters	Doctorate	Grand Total	Percent MA or Higher
Grand Total	32913	801	62266	54%
MOORE	37		63	59%
MORGAN	123		239	51%
MURFREESBORO CITY	218	7	417	54%
DAVIDSON	2930	193	5153	61%
NEWPORT CITY	42	1	54	80%
OAK RIDGE CITY	258	11	370	73%
OBION	142		302	47%
ONEIDA CITY	49		84	58%
OVERTON	127	1	225	57%
PARIS CITY SPECIAL	49	2	97	53%
PERRY	45		98	46%
PICKETT	55		70	79%
POLK	100		169	59%
PUTNAM	371	7	652	58%
RHEA	113	2	267	43%
ROANE	281	5	437	65%
ROBERTSON	322	2	685	47%
ROGERSVILLE CITY	32		51	63%
RUTHERFORD	876	25	1714	53%
SCOTT	118		232	51%
SEQUATCHIE	56	2	133	44%
SEVIER	557	8	808	70%
SHELBY	1422	32	2652	55%
SMITH	84		186	45%
SOUTH CARROLL SPECIAL	8		26	31%
STEWART	57		128	45%
SULLIVAN	592	15	961	63%
SUMNER	724	12	1513	49%
SWEETWATER CITY	33	2	83	42%
TIPTON	235	4	563	42%
TRENTON CITY	50		95	53%
TROUSDALE	49		93	53%
TULLAHOMA CITY	123	2	247	51%
UNICOI	86	4	181	50%
UNION CITY	80	1	120	68%
UNION	100	2	223	46%
VAN BUREN	30		69	43%
W CARROLL SPEC DISTRICT	30		83	36%
WARREN	239	3	464	52%
WASHINGTON	336	16	596	59%
WAYNE	130	1	221	59%
WEAKLEY	160	3	365	45%
WHITE	130	1	246	53%
WILLIAMSON	607	18	1140	55%
WILSON	317	6	758	43%
Grand Total	32913	801	62266	54%

Appendix 4: Districts by Student to Educator Ratio

District Name	1991	1992	1993	1994	1995	1996	1997	1998	1999
State TOTAL	17.6	17.9	17.8	17.1	17.1	17.0	17.3	17.1	17.0
ALAMO CITY	18.9	19.8	17.8	16.8	15.8	15.9	17.1	16.3	14.6
ALCOA CITY	14.0	13.6	14.6	14.3	14.3	13.4	13.1	11.8	13.5
ANDERSON	14.8	15.1	15.2	15.2	15.2	14.7	15.4	14.8	14.1
ATHENS CITY	15.9	16.5	17.6	16.9	16.5	17.1	16.9	15.8	16.1
BEDFORD	17.0	17.0	17.7	17.7	17.2	17.7	17.1	16.7	15.8
BELLS CITY	16.7	19.3	18.7	14.5	17.3	16.5	17.7	16.2	14.0
BENTON	16.2	16.5	15.4	16.2	16.8	16.3	16.1	15.1	14.9
BLEDSON	18.4	16.7	19.1	19.5	16.5	15.4	16.1	17.4	17.5
BLOUNT	18.8	19.3	19.1	19.4	20.2	19.2	19.0	18.7	18.5
BRADFORD SPECIAL	17.4	16.0	16.7	16.5	17.4	17.4	16.0	16.2	15.9
BRADLEY	17.2	17.8	17.4	17.4	18.0	17.3	17.5	17.2	17.2
BRISTOL CITY	14.4	14.5	13.9	14.3	14.6	14.6	13.7	13.6	14.0
CAMPBELL	15.9	15.9	15.9	15.5	15.5	15.3	15.3	14.9	14.9
CANNON	16.1	16.3	16.1	15.6	16.6	15.4	16.4	16.3	15.3
CARROLL	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.5
CARTER	14.9	16.3	14.8	15.0	15.3	14.7	14.5	14.7	14.1
CHEATHAM	19.6	19.4	20.6	20.6	19.6	18.8	18.3	17.2	18.5
CHESTER	18.2	19.5	19.4	19.2	18.4	18.4	17.3	17.4	16.8
CLAIBORNE	14.9	16.0	15.5	15.8	15.1	14.8	14.8	14.2	14.5
CLAY	12.6	12.2	11.9	11.5	11.7	10.7	10.6	11.4	11.8
CLEVELAND CITY	15.3	15.7	16.4	17.4	17.4	16.4	16.4	15.6	15.6
CLINTON CITY	15.0	15.8	14.3	14.1	14.6	12.7	11.2	10.8	11.7
COCKE	18.7	17.6	17.5	17.5	16.7	16.5	15.6	15.4	15.6
COFFEE	15.5	17.2	17.0	16.5	17.0	17.0	16.9	16.4	15.9
COVINGTON CITY	19.6	18.4	18.8	20.2	16.6	15.9	15.9	14.5	13.7
CROCKETT COUNTY	13.6	15.9	15.9	16.3	16.6	16.4	16.4	15.5	15.4
CUMBERLAND	18.1	17.8	19.3	18.7	19.2	20.3	18.9	17.9	19.0
DAYTON CITY	18.3	21.8	21.5	21.6	19.0	19.3	18.9	20.3	17.7
DECATUR	15.4	15.5	15.7	16.6	15.0	13.8	14.0	13.7	13.4
DEKALB	17.8	18.8	18.7	18.1	18.3	17.1	17.4	17.1	15.9
DICKSON	18.8	18.6	18.1	19.7	18.7	18.6	18.3	17.5	16.4
DYER	16.4	17.7	17.2	17.6	17.1	17.3	17.2	17.1	17.4
DYERSBURG CITY	16.7	17.2	16.1	15.7	16.0	16.3	17.0	16.3	15.2
ELIZABETHTON CITY	15.3	16.1	15.7	15.5	15.2	15.2	15.0	13.8	13.6
ETOWAH CITY	13.8	15.3	13.5	13.2	11.6	11.5	13.2	14.8	15.4
FAYETTE	18.2	16.4	17.6	18.0	17.0	16.2	15.2	15.6	15.8
FAYETTEVILLE CITY	15.0	17.4	18.3	18.8	17.9	16.2	16.1	15.9	17.7
FENTRESS	16.0	14.1	14.0	14.3	14.4	13.8	14.1	13.4	13.4
FRANKLIN	10.0	9.9	9.9	9.8	9.7	10.6	10.4	10.9	9.7
FRANKLIN CITY	27.2	28.1	25.6	25.1	24.7	23.5	23.1	23.3	21.5
GIBSON SPEC DISTRICT	17.4	17.6	18.1	17.2	18.3	18.8	18.4	17.7	16.8
GILES	17.1	18.0	17.2	17.0	17.1	15.2	16.0	15.9	16.4
GRAINGER	17.7	16.5	16.3	17.5	16.8	16.6	16.2	15.2	15.2
GREENE	16.0	16.0	16.3	16.1	16.6	15.8	16.9	16.1	16.9
GREENEVILLE CITY	12.3	13.1	12.4	11.8	12.1	11.6	11.8	11.9	11.8
GRUNDY	13.9	13.8	13.8	14.2	14.1	13.9	14.0	12.5	12.5

District Name	1991	1992	1993	1994	1995	1996	1997	1998	1999
State TOTAL	17.6	17.9	17.8	17.1	17.1	17.0	17.3	17.1	17.0
HAMBLEEN COUNTY	16.3	16.1	15.8	15.7	14.4	15.6	16.1	15.2	15.3
HAMILTON	15.3	15.9	16.2	17.8	16.8	16.1	17.5	18.0	17.3
HANCOCK	13.6	13.4	12.3	12.4	12.1	12.3	11.6	10.6	10.4
HARDEMAN	18.1	17.3	16.2	15.9	16.0	15.3	15.1	14.9	15.0
HARDIN	15.5	15.9	15.8	15.9	16.0	16.4	15.6	14.5	14.6
HARRIMAN CITY	13.4	14.6	14.9	15.4	15.6	14.0	14.2	13.3	13.5
HAWKINS	16.6	16.3	15.5	16.0	15.9	15.2	15.1	14.9	14.7
HAYWOOD	16.5	16.7	14.7	14.7	15.4	14.3	14.3	13.7	13.4
HENDERSON	16.7	16.8	17.7	18.4	17.9	17.4	16.8	15.1	14.6
HENRY	17.7	17.5	16.9	17.1	17.4	16.2	15.3	15.6	16.2
HICKMAN	17.5	18.4	17.7	16.7	17.6	16.2	16.9	16.7	15.9
HOLLOW ROCK-BRUCETON	14.7	17.4	16.8	16.6	15.8	15.9	16.4	17.2	16.6
HOUSTON	17.5	17.2	16.6	17.7	17.4	17.8	17.1	16.5	16.9
HUMBOLDT CITY	16.2	15.7	15.7	15.9	15.6	14.2	13.9	13.7	13.2
HUMPHREYS	16.6	17.2	16.4	16.9	17.3	17.1	16.8	16.0	15.4
HUNTINGDON SPECIAL	17.4	16.2	16.4	16.2	16.1	16.0	16.7	16.0	15.9
JACKSON	16.4	15.5	14.1	14.6	14.7	14.1	14.4	13.5	14.8
JEFFERSON	16.0	16.8	17.6	17.9	17.6	17.8	18.6	17.5	17.6
JOHNSON	33.2	32.2	33.9	37.3	36.4	34.1	37.7	35.6	39.5
JOHNSON CITY	6.2	6.1	6.2	6.2	6.5	5.9	5.9	5.9	6.2
KINGSPORT CITY	15.6	16.0	14.3	14.4	13.9	14.4	15.3	14.9	15.9
KNOX	16.5	15.1	15.2	15.6	15.9	15.8	16.1	15.7	15.2
LAKE	15.3	15.8	15.1	14.3	14.2	12.9	13.4	13.0	13.3
LAUDERDALE	17.2	16.4	17.2	17.9	18.3	16.5	16.4	16.3	16.1
LAWRENCE	16.9	17.5	17.2	17.5	17.4	17.0	16.4	16.0	16.1
LEBANON CITY	17.2	16.5	16.0	15.8	15.0	15.0	15.9	15.4	16.8
LENOIR CITY	20.2	19.9	19.9	18.0	17.2	17.4	18.0	17.1	16.6
LEWIS	17.7	18.3	18.8	17.3	17.7	17.2	17.0	16.6	15.9
LEXINGTON CITY	19.2	18.6	18.1	15.6	18.4	19.2	19.2	17.4	15.2
LINCOLN	16.3	16.7	17.0	16.8	16.7	16.1	15.9	14.4	15.4
LOUDON	15.8	16.0	16.1	16.7	17.5	17.2	17.3	17.1	16.9
MACON	19.4	19.4	19.6	18.7	18.3	17.8	17.0	16.7	16.0
MADISON	17.2	17.7	16.9	16.8	15.5	14.4	16.3	14.6	14.7
MANCHESTER CITY	14.3	16.3	16.5	16.3	15.8	15.0	15.3	12.3	13.2
MARION	16.0	16.7	16.7	16.7	16.2	15.1	15.2	16.7	14.8
MARION	20.2	19.3	18.4	18.7	20.1	16.3	14.5	14.7	14.1
MARSHALL	17.5	18.2	17.4	18.5	17.9	17.0	17.2	17.0	16.1
MARYVILLE CITY	16.3	16.9	16.1	16.0	16.0	16.3	16.3	16.1	14.8
MAURY	18.5	17.7	17.2	17.3	17.1	16.9	16.0	16.9	15.6
MCKENZIE SPECIAL	17.2	17.3	17.7	17.3	17.7	17.2	16.0	15.6	15.5
MCMINN	16.5	16.9	17.7	17.7	17.4	17.7	17.6	17.2	16.9
MCNAIRY	16.9	17.3	16.6	16.7	16.6	15.7	15.2	15.3	14.5
MEIGS	15.9	18.3	17.9	17.1	17.2	16.8	16.4	15.7	16.8
MEMPHIS CITY	17.0	17.4	17.0	17.1	17.3	17.1	18.2	18.7	18.2
MILAN CITY SPECIAL	17.7	17.1	15.9	16.0	15.6	15.4	14.9	14.6	14.8
MONROE	17.7	18.4	18.7	18.8	18.0	18.0	18.1	17.7	16.8
MONTGOMERY	19.1	20.7	20.2	21.3	20.6	20.8	19.4	19.9	21.3

District Name	1991	1992	1993	1994	1995	1996	1997	1998	1999
State TOTAL	17.6	17.9	17.8	17.1	17.1	17.0	17.3	17.1	17.0
MOORE	14.9	15.9	15.5	16.4	17.0	16.5	15.8	17.6	16.3
MORGAN	18.8	17.3	16.8	16.1	15.5	15.8	15.1	14.6	15.4
MURFREESBORO CITY	17.3	17.6	17.2	16.8	17.1	18.3	14.3	14.8	17.7
DAVIDSON	15.3	15.9	16.7	16.8	16.5	16.3	16.0	17.6	17.0
NEWPORT CITY	18.0	17.4	16.6	17.3	16.6	16.4	16.0	15.7	14.9
OAK RIDGE CITY	13.4	13.6	13.5	13.3	13.9	12.6	12.8	12.6	13.0
OBION	16.4	16.5	15.9	15.7	16.6	16.1	16.1	15.5	15.0
ONEIDA CITY	15.6	15.6	14.7	15.1	15.1	15.3	14.8	13.8	14.7
OVERTON	16.9	16.1	15.4	15.6	15.3	15.3	15.0	14.6	14.0
PARIS CITY SPECIAL	14.5	14.5	15.4	17.7	17.3	19.2	20.1	17.3	16.1
PERRY	13.9	15.5	14.0	14.4	15.7	15.1	15.0	13.5	13.2
PICKETT	14.1	14.5	14.3	14.3	13.7	12.0	12.1	11.6	11.4
POLK	16.3	16.4	15.4	16.0	15.5	15.2	15.4	15.9	15.9
PUTNAM	17.6	18.0	17.4	18.0	18.7	17.8	19.3	17.6	16.1
RHEA	15.6	16.4	16.5	17.9	18.7	18.4	18.5	17.4	17.5
ROANE	16.6	16.4	16.6	17.8	17.1	15.3	15.8	15.3	14.2
ROBERTSON	18.5	18.7	18.3	18.8	19.5	19.8	17.9	17.3	16.9
ROGERSVILLE CITY	14.2	16.4	18.7	17.1	17.2	16.2	15.6	14.9	14.4
RUTHERFORD	18.8	18.9	19.4	19.2	19.5	19.4	19.9	19.1	17.7
SCOTT	17.3	16.7	17.0	17.1	16.2	14.9	14.7	14.0	13.3
SEQUATCHIE	13.8	13.8	13.3	13.7	15.1	15.8	16.3	16.4	15.9
SEVIER	17.8	17.3	17.9	17.6	18.0	18.9	18.9	17.6	17.5
SHELBY	22.7	23.1	21.3	20.6	20.9	20.8	20.9	19.7	20.0
SMITH	17.8	18.5	18.7	18.7	18.7	18.2	18.1	17.8	17.5
SOUTH CARROLL SPECIAL	16.9	17.6	16.2	17.3	15.3	14.5	14.9	15.4	14.6
STEWART	15.8	17.1	17.6	18.0	19.2	18.5	18.7	19.0	18.7
SULLIVAN	13.5	13.9	14.0	14.4	14.5	14.6	14.9	15.5	14.8
SUMNER	17.8	18.0	17.8	17.8	17.6	17.6	17.7	17.7	15.1
SWEETWATER CITY	17.6	19.1	17.7	19.5	18.5	17.4	17.7	16.8	16.6
TIPTON	21.2	22.2	21.4	22.7	22.3	20.8	19.6	18.9	19.2
TRENTON CITY	14.9	14.4	13.6	15.7	16.1	15.9	16.1	16.0	15.7
TROUSDALE	16.4	16.6	15.6	16.3	16.5	16.4	17.0	16.8	15.1
TULLAHOMA CITY	15.9	16.0	16.0	15.9	15.2	15.2	15.1	14.7	14.9
UNICOI	15.7	16.1	15.8	16.8	16.1	16.2	16.2	15.7	14.6
UNION	14.5	13.8	12.3	11.2	10.2	9.6	9.4	8.7	8.7
UNION CITY	17.2	17.9	18.8	20.1	22.3	24.1	25.7	26.4	26.7
VAN BUREN	15.8	15.2	16.6	16.9	15.1	14.5	13.1	13.2	13.2
W CARROLL SPEC DISTRICT	17.2	17.2	16.9	17.0	17.3	16.9	16.7	16.2	15.4
WARREN	16.6	16.6	16.3	16.9	16.2	16.4	15.6	15.4	14.9
WASHINGTON	15.3	15.6	16.1	16.5	16.4	16.6	16.4	16.5	16.8
WAYNE	14.7	16.2	16.0	16.3	15.1	15.3	14.8	14.9	13.9
WEAKLEY	16.1	15.6	15.1	16.6	17.1	17.0	16.4	15.7	15.6
WHITE	15.8	16.7	16.5	17.2	17.4	16.6	17.4	16.8	17.5
WILLIAMSON	18.0	18.3	16.7	19.3	18.2	19.3	18.9	18.1	19.0
WILSON	19.3	19.3	20.8	21.5	20.3	20.3	20.6	19.3	18.8
TOTAL	17.6	17.9	17.8	17.1	17.1	17.0	17.3	17.1	17.0

Appendix 5: District Educators by Percent Non-Teachers

Districts	Administrators	Professional Staff	Grand Total	Percent Non-Teacher
State Total	2,745	5,970	62,266	14%
ALAMO CITY	3	6	44	20%
ALCOA CITY	5	10	105	14%
ANDERSON	22	61	550	15%
ATHENS CITY	8	12	125	16%
BEDFORD	18	42	395	15%
BELLS CITY	2		27	7%
BENTON	9	19	187	15%
BLED SOE	6	13	127	15%
BLOUNT	26	66	685	13%
BRADFORD SPECIAL	4	6	40	25%
BRADLEY	25	62	598	15%
BRISTOL CITY	13	29	269	16%
CAMPBELL	29	39	473	14%
CANNON	8	16	156	15%
CARTER	23	47	507	14%
CHEATHAM	23	44	429	16%
CHESTER	9	17	169	15%
CLAIBORNE	17	50	400	17%
CLAY	3	14	98	17%
CLEVELAND CITY	13	41	340	16%
CLINTON CITY	4	14	84	21%
COCKE	16	32	317	15%
COFFEE	14	25	298	13%
COVINGTON CITY	2	8	61	16%
CROCKETT COUNTY	9	7	109	15%
CUMBERLAND	16	32	415	12%
DAYTON CITY	3	2	41	12%
DECATUR	5	16	147	14%
DEKALB	8	20	184	15%
DICKSON	27	47	508	15%
DYER	14	14	219	13%
DYERSBURG CITY	13	21	222	15%
ELIZABETHTON CITY	8	18	169	15%
ETOWAH CITY	3	1	31	13%
FAYETTE	13	25	254	15%
FAYETTEVILLE CITY	6	9	71	21%
FENTRESS	7	17	181	13%
FRANKLIN CITY	14	26	325	12%
FRANKLIN	16	29	415	11%
GIBSON SPEC DISTRICT	9	7	142	11%
GILES	13	34	326	14%
GRAINGER	11	23	216	16%
Grand Total	2745	5970	62266	14%
GREENE	25	32	491	12%
GREENEVILLE CITY	11	22	208	16%

Districts	Administrators	Professional Staff	Grand Total	Percent Non-Teacher
State Total	2,745	5,970	62,266	14%
GRUNDY	12	17	196	15%
HAMBLEEN COUNTY	28	59	681	13%
HAMILTON	131	289	2789	15%
HANCOCK	7	16	105	22%
HARDEMAN	17	35	347	15%
HARDIN	11	32	289	15%
HARRIMAN CITY	7	14	117	18%
HAWKINS	26	50	517	15%
HAYWOOD	17	32	314	16%
HENDERSON	12	15	235	11%
HENRY	10	25	219	16%
HICKMAN	10	17	226	12%
HOLLOW ROCK-BRUCETONS	3	6	56	16%
HOUSTON	6	12	94	19%
HUMBOLDT CITY	9	20	157	18%
HUMPHREYS	12	19	223	14%
HUNTINGDON SPECIAL	4	9	96	14%
JACKSON	5	18	125	18%
JEFFERSON	17	44	436	14%
JOHNSON CITY	19	48	475	14%
JOHNSON	13	19	179	18%
KINGSPORT CITY	24	43	439	15%
KNOX	165	473	4161	15%
LAKE	4	7	76	14%
LAUDERDALE	18	28	353	13%
LAWRENCE	19	46	476	14%
LEBANON CITY	9	18	203	13%
LENOIR CITY	7	16	135	17%
LEWIS	7	13	132	15%
LEXINGTON CITY	2	7	61	15%
LINCOLN	18	31	316	16%
LOUDON	18	28	296	16%
MACON	12	22	241	14%
MADISON	44	116	1064	15%
MANCHESTER CITY	5	13	94	19%
MARION	11	39	322	16%
MARSHALL	15	34	350	14%
MARYVILLE CITY	13	27	300	13%
MAURY	33	87	839	14%
MCKENZIE SPECIAL	4	9	91	14%
MCMINN	13	29	366	11%
MCNAIRY	17	23	279	14%
MEIGS	6	10	113	14%
MEMPHIS CITY	293	564	7147	12%
MILAN CITY SPECIAL	7	17	167	14%
MONROE	12	27	311	13%

Districts	Administrators	Professional Staff	Grand Total	Percent Non-Teacher
State Total	2,745	5,970	62,266	14%
MONTGOMERYSCHS	67	132	1567	13%
MOORE	5	7	63	19%
MORGAN	17	15	239	13%
MURFREESBORO CITY	20	36	417	13%
DAVIDSON	195	438	5153	12%
NEWPORT CITY	3	5	54	15%
OAK RIDGE CITY	12	41	370	14%
OBION	11	25	302	12%
ONEIDA CITY	4	10	84	17%
OVERTON	11	26	225	16%
PARIS CITY SPECIAL	5	11	97	16%
PERRY	6	11	98	17%
PICKETT	4	11	70	21%
POLK	9	14	169	14%
PUTNAM	29	85	652	17%
RHEA	14	23	267	14%
ROANE	22	44	437	15%
ROBERTSON	30	66	685	14%
ROGERSVILLE CITY	2	4	51	12%
RUTHERFORD	62	169	1714	13%
SCOTT	9	23	232	14%
SEQUATCHIE	7	17	133	18%
SEVIER	42	75	808	14%
SHELBY	81	276	2652	13%
SMITH	12	17	186	16%
SOUTH CARROLL SPECIAL	2	1	26	12%
STEWART	8	12	128	16%
SULLIVAN	49	85	961	14%
SUMNER	60	134	1513	13%
SWEETWATER CITY	4	7	83	13%
TIPTON	31	37	563	12%
TRENTON CITY	5	13	95	19%
TROUSDALE	5	10	93	16%
TULLAHOMA CITY	11	27	247	15%
UNICOI	11	20	181	17%
UNION CITY	8	13	120	18%
UNION	11	19	223	13%
VAN BUREN	3	14	69	25%
W CARROLL SPEC DISTRICT	5	9	83	17%
WARREN	19	45	464	14%
WASHINGTON	26	59	596	14%
WAYNE	10	32	221	19%
WEAKLEY	16	36	365	14%
WHITE	13	24	246	15%
WILLIAMSON	51	121	1140	15%
WILSON	33	73	758	14%

Appendix 6: Districts Educators by Average Educator Experience

District	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
State Total	14	15	15	15	15	15	15	15	15	15
ALAMO CITY	12	13	13	12	12	13	14	12	13	13
ALCOA CITY	14	15	15	15	16	16	17	16	16	16
ANDERSON	14	15	15	14	14	14	14	14	14	14
ATHENS CITY	16	16	16	16	16	17	17	17	17	17
BEDFORD	12	13	13	13	13	13	13	13	14	14
BELLS CITY	14	13	10	11	11	9	10	11	13	12
BENTON	14	14	14	15	15	14	14	14	14	15
BLED SOE	11	12	13	11	11	12	12	12	12	12
BLOUNT	16	16	16	16	16	16	16	15	14	15
BRADFORD SPECIAL	15	16	17	16	17	16	17	17	18	17
BRADLEY	13	14	15	15	15	15	16	16	15	16
BRISTOL CITY	16	15	16	16	16	16	16	17	17	17
CAMPBELL	15	15	15	16	16	17	17	16	17	17
CANNON	11	11	12	12	12	13	13	13	14	13
CARTER	15	15	16	16	16	16	16	16	15	15
CHEATHAM	11	11	12	12	11	11	11	11	12	11
CHESTER	15	15	16	15	16	15	15	14	14	14
CLAIBORNE	14	14	14	14	14	15	15	15	15	15
CLAY	15	15	15	15	15	15	16	16	17	17
CLEVELAND CITY	16	17	17	17	17	17	17	17	17	17
CLINTON CITY	13	12	13	14	15	15	16	16	16	17
COCKE	13	14	14	14	14	14	15	15	15	16
COFFEE	13	14	14	14	14	14	14	14	14	15
COVINGTON CITY	15	16	17	16	16	15	15	14	14	13
CROCKETT COUNTY	13	14	14	14	13	13	12	13	13	13
CUMBERLAND	14	14	15	14	14	14	14	14	15	15
DAYTON CITY	15	15	16	16	17	17	17	16	15	16
DECATUR	13	13	14	14	14	14	15	14	14	15
DEKALB	15	15	16	15	15	15	15	14	14	15
DICKSON	13	13	14	14	14	14	13	13	13	14
DYER	14	15	15	15	15	15	16	16	16	15
DYERSBURG CITY	16	16	15	16	17	17	18	18	19	19
ELIZABETHTON CITY	17	18	17	16	17	17	16	17	16	17
ETOWAH CITY	10	10	10	10	10	11	12	12	13	11
FAYETTE	15	15	15	14	14	14	13	14	13	14
FAYETTEVILLE CITY	16	16	17	18	17	18	16	17	15	16
FENTRESS	13	14	14	15	15	16	16	16	17	17
FRANKLIN CITY	13	13	13	13	13	14	14	13	14	14
FRANKLIN	14	14	15	15	14	14	15	14	14	14
GIBSON SPEC DISTRICT	14	15	14	15	15	15	15	14	14	14
GILES	15	15	16	15	15	15	15	15	15	16
GRAINGER	11	12	13	12	12	12	12	13	13	14
GREENE	15	16	17	17	17	16	16	16	15	15
GREENEVILLE CITY	16	16	17	17	16	16	16	15	16	15
GRUNDY	11	12	12	11	12	12	12	13	13	13

District	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
State Total	14	15	15	15	15	15	15	15	15	15
HAMBLEEN COUNTY SCHOOL DISTRICT	15	15	16	16	16	16	16	16	16	16
HAMILTON	13	14	14	14	14	15	15	15	16	16
HANCOCK	13	13	13	13	13	13	13	14	16	15
HARDEMAN	14	13	14	13	13	13	13	14	14	13
HARDIN	13	13	13	14	14	14	15	15	15	16
HARRIMAN CITY	16	16	17	18	18	17	17	19	19	20
HAWKINS	15	15	16	15	15	15	16	16	16	16
HAYWOOD	15	14	15	15	14	14	14	14	14	14
HENDERSON	14	15	15	15	15	15	14	14	14	14
HENRY	15	16	16	17	16	17	17	18	17	17
HICKMAN	13	12	13	12	12	11	11	11	12	12
HOLLOW ROCK-BRUCETONS	15	16	16	16	16	16	16	16	16	16
HOUSTON	12	12	12	12	12	12	12	13	13	14
HUMBOLDT CITY	15	16	16	16	16	16	16	17	17	16
HUMPHREYS	14	14	15	14	15	14	13	14	14	14
HUNTINGDON SPECIAL	16	16	16	16	15	16	16	16	17	17
JACKSON	13	13	13	13	13	13	13	15	15	15
JEFFERSON	15	15	16	15	15	15	15	14	14	14
JOHNSON CITY	14	14	15	15	15	16	16	16	15	16
JOHNSON	11	11	12	11	11	12	12	13	13	14
KINGSPORT CITY	15	16	15	15	16	16	16	16	16	16
KNOX	14	14	14	14	15	15	15	15	15	14
LAKE	14	13	14	13	13	14	14	14	15	15
LAUDERDALE	14	14	14	13	13	13	13	13	13	13
LAWRENCE	14	14	15	15	15	15	15	15	15	16
LEBANON CITY	13	13	13	13	12	13	14	14	13	13
LENOIR CITY	17	16	16	15	15	16	16	15	13	14
LEWIS	12	12	13	12	12	12	13	13	13	12
LEXINGTON CITY	17	18	18	17	18	18	17	17	16	15
LINCOLN	15	15	15	14	14	15	15	15	15	15
LOUDON	13	13	13	14	14	14	14	14	14	14
MACON	13	14	14	13	13	13	12	13	12	12
MADISON	15	16	16	16	16	16	16	16	16	17
MANCHESTER CITY	15	15	16	15	16	17	16	15	16	16
MARION	14	14	14	13	14	14	15	15	15	15
MARSHALL	13	13	14	14	14	14	14	13	14	14
MARYVILLE CITY	14	14	13	14	15	15	15	16	14	15
MAURY	14	14	14	14	14	14	14	14	14	14
MCKENZIE SPECIAL	16	16	17	16	16	15	15	16	15	15
MCMINN	15	16	16	16	16	15	16	16	16	16
MCNAIRY	13	14	14	14	13	14	14	14	14	14
MEIGS	13	13	14	13	14	13	14	14	15	15
MEMPHIS CITY	16	17	17	17	17	17	16	16	16	16
MILAN CITY SPECIAL	14	15	16	15	14	14	14	14	14	14
MONROE	13	13	14	13	13	13	13	13	13	13
MONTGOMERYSCHS	14	15	14	13	13	13	13	13	12	12

District	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
State Total	14	15	15	15	15	15	15	15	15	15
MOORE	13	14	15	14	14	14	15	16	16	18
MORGAN	13	13	13	12	12	12	12	12	12	13
MURFREESBORO CITY	13	13	13	14	14	13	14	14	14	13
DAVIDSON	16	17	16	15	15	15	16	15	15	14
NEWPORT CITY	14	13	15	16	16	17	17	18	18	19
OAK RIDGE CITY	15	15	16	16	17	16	16	16	16	17
OBION	15	16	16	16	17	17	17	17	17	18
ONEIDA CITY	13	13	12	12	13	13	14	13	13	14
OVERTON	15	15	16	16	16	16	16	16	15	15
PARIS CITY SPECIAL	15	15	15	14	15	15	14	14	15	16
PERRY	11	11	12	12	12	12	12	12	12	12
PICKETT	12	13	13	13	12	13	13	14	14	15
POLK	17	16	18	17	16	15	16	16	16	16
PUTNAM	14	14	14	14	15	14	14	13	13	14
RHEA	12	13	14	14	14	14	15	15	15	15
ROANE	14	15	15	14	14	15	15	14	14	14
ROBERTSON	14	14	14	14	14	13	13	13	13	13
ROGERSVILLE CITY	12	11	11	11	12	12	11	11	12	11
RUTHERFORD	13	14	14	14	14	14	14	13	13	13
SCOTT	15	15	15	15	15	14	14	14	14	14
SEQUATCHIE	11	12	13	14	13	13	14	14	14	13
SEVIER	12	12	12	12	13	13	13	13	13	13
SHELBY	12	12	12	13	13	13	13	13	13	13
SMITH	13	13	14	13	12	13	14	14	14	14
SOUTH CARROLL SPECIAL	13	12	13	13	14	14	12	12	14	13
STEWART	14	15	16	16	15	15	15	15	13	12
SULLIVAN	16	17	17	17	17	18	18	17	17	17
SUMNER	13	13	14	14	14	14	13	14	14	14
SWEETWATER CITY	15	15	14	14	13	13	14	14	13	14
TIPTON	13	13	13	13	12	12	12	13	13	13
TRENTON CITY	15	14	15	15	16	16	17	17	17	16
TROUSDALE	13	13	15	13	13	12	13	12	12	13
TULLAHOMA CITY	16	16	17	16	17	17	16	16	16	16
UNICOI	14	15	15	15	14	15	15	15	14	15
UNION CITY	16	16	16	17	18	19	19	19	19	19
UNION	13	13	13	12	12	12	12	13	12	11
VAN BUREN	11	12	12	12	12	12	12	13	14	13
W CARROLL SPEC DISTRICT	13	13	15	15	15	15	15	15	16	16
WARREN	14	13	14	13	14	14	14	15	15	15
WASHINGTON	15	16	17	16	16	16	16	16	16	16
WAYNE	12	13	14	13	14	14	14	14	14	15
WEAKLEY	14	14	15	15	15	15	15	15	15	15
WHITE	15	15	15	15	15	15	15	15	15	15
WILLIAMSON	13	13	14	14	14	14	14	14	14	14
WILSON	12	12	13	12	12	12	13	13	13	12

Appendix 7: All districts counts of permits and waivers in 1999-2000.

District Name	1999-2000 Waivers	1999-2000 Permits	1999-2000 Waivers + Permits	Total Educators 1999	Waivers and Permits as a Percent of Total Workforce 1999
State Total	820	1357	2177	62310	3%
ALAMO CITY				44	0%
ALCOA CITY				105	0%
ANDERSON	1	1	2	550	0%
ATHENS CITY				125	0%
BEDFORD	9	4	13	395	3%
BELLS CITY				27	0%
BENTON	1	3	4	187	2%
BLED SOE	3		3	127	2%
BLOUNT	6	3	9	685	1%
BRADFORD SPECIAL	4	6	10	40	25%
BRADLEY				598	0%
BRISTOL CITY				269	0%
CAMPBELL	9	3	12	473	3%
CANNON	3	4	7	156	4%
CARROLL				21	0%
CARTER	1		1	507	0%
CHEATHAM	19	11	30	429	7%
CHESTER	4		4	169	2%
CLAIBORNE	9	1	10	400	3%
CLAY				98	0%
CLEVELAND CITY	1		1	340	0%
CLINTON CITY	1		1	84	1%
COCKE	1		1	317	0%
COFFEE	7	1	8	298	3%
COVINGTON CITY	2	1	3	61	5%
CROCKETT COUNTY	3	2	5	109	5%
CUMBERLAND	9	1	10	415	2%
DAVIDSON	56	188	244	5153	5%
DAYTON CITY ELEM	1		1	41	2%
DECATUR	5	3	8	147	5%
DEKALB	1		1	184	1%
DICKSON	9	8	17	508	3%
DYER	7	1	8	219	4%
DYERSBURG CITY	4		4	222	2%
ELIZABETHTON CITY				169	0%
ETOWAH CITY				31	0%
FAYETTE	6	21	27	325	8%
FENTRESS	6		6	181	3%
FRANKLIN	17		17	415	4%
FRANKLIN CITY	2	3	5	325	2%
GIBSON SPEC DISTRICT				142	0%
GILES	8		8	326	2%
GRAINGER	3	1	4	216	2%
GREENE	1		1	491	0%

District Name	1999-2000 Waivers	1999-2000 Permits	1999-2000 Waivers + Permits	Total Educators 1999	Waivers and Permits as a Percent of Total Workforce 1999
State Total	820	1357	2177	62310	3%
GREENEVILLE CITY	1		1	208	0%
GRUNDY	10	5	15	196	8%
HAMBLEN COUNTY	4	1	5	681	1%
HAMILTON	36	61	97	2789	3%
HANCOCK				105	0%
HARDEMAN	10	17	27	347	8%
HARDIN	1		1	289	0%
HARRIMAN CITY	1		1	117	1%
HAWKINS	5	1	6	517	1%
HAYWOOD	4	10	14	314	4%
HENDERSON	3	2	5	235	2%
HENRY	3	2	5	219	2%
HICKMAN	6	10	16	226	7%
HOLLOW ROCK-BRUCETON				56	0%
HOUSTON	4		4	94	4%
HUMBOLDT CITY	4	5	9	157	6%
HUMPHREYS	2	1	3	223	1%
HUNTINGDON SPECIAL				96	0%
JACKSON	4	2	6	125	5%
JACKSON-MADISON	5	6	11	1064	1%
JEFFERSON	6		6	436	1%
JOHNSON	5		5	179	3%
JOHNSON CITY	1	1	2	475	0%
KINGSPORT CITY				439	0%
KNOX	9	1	10	4161	0%
LAKE	1		1	76	1%
LAUDERDALE	12	5	17	353	5%
LAWRENCE	20	1	21	476	4%
LEBANON CITY	2		2	203	1%
LENOIR CITY				135	0%
LEWIS	5		5	132	4%
LEXINGTON CITY				61	0%
LINCOLN	13	1	14	316	4%
LOUDON	11		11	296	4%
MACON	2	5	7	241	3%
MANCHESTER CITY	3		3	94	3%
MARION	11	9	20	345	6%
MARSHALL	7	7	14	350	4%
MARYVILLE CITY				300	0%
MAURY	15	12	27	839	3%
MCKENZIE SPECIAL	3	1	4	91	4%
MCMINN	1		1	366	0%
MCNAIRY	7	1	8	279	3%

District Name	1999-2000 Waivers	1999-2000 Permits	1999-2000 Waivers + Permits	Total Educators 1999	Waivers and Permits as a Percent of Total Workforce 1999
State Total	820	1357	2177	62310	3%
MEIGS	1	3	4	113	4%
MEMPHIS CITY	134	807	941	7147	13%
MILAN CITY SPECIAL	1		1	167	1%
MONROE	3	2	5	311	2%
MONTGOMERY	11		11	1567	1%
MOORE	2		2	63	3%
MORGAN	5	2	7	239	3%
MURFREESBORO CITY		1	1	417	0%
NEWPORT CITY				54	0%
OAK RIDGE CITY	2		2	370	1%
OBION				302	0%
ONEIDA CITY	4		4	84	5%
OVERTON	6		6	225	3%
PARIS CITY SPECIAL				97	0%
PERRY	2	2	4	98	4%
PICKETT	1	1	2	70	3%
POLK	8	3	11	169	7%
PUTNAM	6	1	7	652	1%
RHEA	1	2	3	267	1%
ROANE	1	1	2	437	0%
ROBERTSON	10	4	14	685	2%
ROGERSVILLE CITY				51	0%
RUTHERFORD	6	1	7	1714	0%
SCOTT	5	2	7	232	3%
SEQUATCHIE	2	4	6	133	5%
SEVIER	7	1	8	808	1%
SHELBY	24	7	31	2652	1%
SMITH	4		4	186	2%
SOUTH CARROLL SPECIAL				26	0%
STEWART	1	1	2	128	2%
SULLIVAN		1	1	961	0%
SUMNER	44	16	60	1513	4%
SWEETWATER CITY				83	0%
TIPTON	22	21	43	563	8%
TRENTON CITY	2	1	3	95	3%
TROUSDALE	1		1	93	1%
TULLAHOMA CITY	3	1	4	247	2%
UNICOI		1	1	181	1%
UNION	4	5	9	223	4%
UNION CITY				120	0%
VAN BUREN	2		2	69	3%
W CARROLL SPEC DISTRICT				83	0%
WARREN	7	2	9	464	2%

District Name	1999-2000 Waivers	1999-2000 Permits	1999-2000 Waivers + Permits	Total Educators 1999	Waivers and Permits as a Percent of Total Workforce 1999
State Total	820	1357	2177	62310	3%
WASHINGTON		4	4	596	1%
WAYNE	4	5	9	221	4%
WEAKLEY	2	4	6	365	2%
WHITE	3	1	4	246	2%
WILLIAMSON	15	5	20	1140	2%
WILSON	8	12	20	758	3%
State Total	820	1357	2177	62310	3%

Appendix 8: Change in Total Enrollments

District	1991	1992	1993	1994	1995	1996	1997	1998	1999	1991-1995	1995-1999
State Total	880246	893272	906975	923673	936400	948217	962645	978438	967556	6%	3%
ALAMO	547	594	568	554	567	620	649	619	597	4%	5%
ALCOA	1446	1515	1499	1532	1573	1585	1494	1331	1373	9%	-13%
ANDERSON	7015	7159	7229	7322	7554	7422	7691	7414	7341	8%	-3%
ATHENS	1975	2044	2117	2067	2074	2081	2092	1960	1999	5%	-4%
BEDFORD	5710	5865	6049	6144	6159	6529	6498	6338	6360	8%	3%
BELLS	318	366	374	333	380	363	407	388	363	19%	-4%
BENTON	2684	2640	2667	2752	2867	2884	2907	2834	2763	7%	-4%
BLED SOE	1712	1723	1814	1792	1795	1770	1848	2001	1958	5%	9%
BLOUNT	10422	10641	10861	11027	11351	10985	10987	11198	11354	9%	0%
BRADFORD	732	673	667	677	680	660	640	664	666	-7%	-2%
BRADLEY	9295	9698	9700	9514	9730	9467	9654	9509	9453	5%	-3%
BRISTOL	3825	3938	3919	4113	4134	4135	3855	3895	3905	8%	-6%
CAMPBELL	6803	6761	6746	6726	6811	6684	6747	6801	6974	0%	2%
CANNON	1852	1987	2002	1964	2125	2062	2143	2183	2170	15%	2%
CARTER	6360	6815	6218	6322	6565	6353	6464	6709	6581	3%	0%
CHEATHAM	5912	5948	6242	6405	6568	6552	6772	6859	7247	11%	10%
CHESTER	2243	2398	2442	2516	2499	2560	2541	2577	2621	11%	5%
CLAIBORNE	4958	5158	5162	5208	5240	5237	5210	5098	5199	6%	-1%
CLAY	1372	1379	1348	1320	1348	1286	1258	1322	1252	-2%	-7%
CLEVELAND	4438	4628	4818	5189	5210	5169	5168	5056	4953	17%	-5%
CLINTON	1138	1251	1175	1169	1165	1068	963	958	946	2%	-19%
COCKE	4884	4838	4862	4881	4929	4962	4889	4953	4919	1%	0%
COFFEE	3683	3964	4020	4006	4250	4324	4543	4497	4339	15%	2%
COVINGTON	1233	1234	1203	1171	1129	1110	1099	1041	973	-8%	-14%
CROCKETT	1510	1716	1683	1788	1810	1908	1923	1839	1866	20%	3%
CUMBERLAND	6163	6072	6803	6569	6837	7596	7326	7117	7519	11%	10%
DAVIDSON	70192	71351	72231	74906	75439	77321	75585	81687	80750	7%	7%
DAYTON	677	762	752	756	758	752	775	834	727	12%	-4%
DECATUR	1907	1871	1882	1948	1917	1883	1846	1877	1913	1%	0%
DEKALB	2729	2839	2864	2831	2866	2840	2914	2909	2742	5%	-4%
DICKSON	7177	7269	7462	7874	7959	8240	8469	8311	8352	11%	5%
DYER	3426	3667	3569	3600	3576	3585	3641	3685	3711	4%	4%
DYERSBURG	3496	3504	3595	3519	3551	3624	3653	3604	3460	2%	-3%
ELIZABETHTON	2468	2633	2628	2547	2586	2575	2450	2312	2206	5%	-15%
ETOWAH	399	445	337	330	301	322	382	399	416	-25%	38%
FAYETTE	5193	4671	5140	5138	5155	4815	4498	4398	4265	-1%	-17%
FAYETTEVILLE	946	1063	1137	1164	1179	1115	1141	1175	1166	25%	-1%
FENTRESS	2479	2471	2463	2491	2569	2509	2536	2435	2432	4%	-5%
FRANKLIN	6120	6483	6349	6465	6640	6456	6341	6373	6369	8%	-4%
FRANKLIN	3692	3783	3688	3758	3658	4148	4172	4492	4250	-1%	16%

District	1991	1992	1993	1994	1995	1996	1997	1998	1999	1991-1995	1995-1999
State Total	880246	893272	906975	923673	936400	948217	962645	978438	967556	6%	3%
GIBSON . SPEC.	2100	2218	2245	2264	2399	2524	2487	2456	2519	14%	5%
GILES	4690	4871	4878	4973	5210	4789	5137	5146	5083	11%	-2%
GRAINGER	3106	3187	3229	3363	3437	3427	3395	3308	3292	11%	-4%
GREENE	6734	6740	6729	6748	6942	6856	7145	7182	7259	3%	5%
GREENEVILLE	2706	2799	2816	2636	2697	2639	2642	2593	2516	0%	-7%
GRUNDY	2664	2712	2685	2673	2694	2716	2715	2491	2439	1%	-9%
HAMBLEN	9620	9586	9682	9679	9153	9832	9922	9709	9742	-5%	6%
HAMILTON	46672	47086	48951	51302	48600	47440	49666	49774	47231	4%	-3%
HANCOCK	1262	1301	1295	1334	1346	1389	1340	1260	1172	7%	-13%
HARDEMAN	5344	5346	5339	5365	5276	5145	5059	4959	5005	-1%	-5%
HARDIN	4098	4160	4211	4208	4284	4471	4354	4250	4268	5%	0%
HARRIMAN	1844	1947	1941	1940	1920	1766	1786	1678	1591	4%	-17%
HAWKINS	7279	7150	7021	6993	7147	7152	7272	7339	7313	-2%	2%
HAYWOOD	4274	4372	4246	4163	4290	4118	4191	4039	3958	0%	-8%
HENDERSON	3308	3313	3503	3671	3723	3597	3692	3544	3496	13%	-6%
HENRY	3788	3768	3807	3833	3935	3684	3526	3588	3639	4%	-8%
HICKMAN	2957	3145	3243	3185	3376	3522	3741	3739	3738	14%	11%
HOLLOW ROCK-BR	751	852	838	879	855	875	888	894	899	14%	5%
HOUSTON	1366	1429	1398	1435	1427	1459	1492	1503	1453	4%	2%
HUMBOLDT	2505	2498	2474	2482	2424	2299	2271	2243	2172	-3%	-10%
HUMPHREYS	3011	3109	3125	3082	3249	3270	3305	3271	3224	8%	-1%
HUNTINGDON	1517	1446	1490	1502	1517	1502	1499	1492	1490	0%	-2%
JACKSON COUNTY	1572	1582	1577	1604	1571	1577	1629	1644	1721	0%	10%
JEFFERSON	5521	5702	6058	6036	6131	6173	6526	6596	6792	11%	11%
JOHNSON	2460	2535	2537	2615	2609	2500	2479	2566	2539	6%	-3%
JOHNSON CITY	5982	6123	6340	6566	6624	6521	6863	6371	7230	11%	9%
KINGSPORT	6116	6276	6329	6345	6314	6531	7004	6767	6853	3%	9%
KNOX	58437	54504	55499	55563	57016	56935	57693	57370	56590	-2%	-1%
LAKE	1180	1246	1265	1234	1222	1190	1168	1093	1053	4%	-14%
LAUDERDALE	5146	5052	5317	5335	5678	5322	5308	5320	5135	10%	-10%
LAWRENCE	6365	6683	6848	7035	7170	7186	7253	7180	7354	13%	3%
LEBANON	2528	2477	2539	2560	2612	2828	2837	2752	3178	3%	22%
LENOIR CITY	1961	2048	2007	1892	1822	1981	2019	2012	2026	-7%	11%
LEWIS	1889	1939	2029	1967	2049	2046	2071	2047	2015	8%	-2%
LEXINGTON	845	874	871	798	938	980	1000	973	898	11%	-4%
LINCOLN	4264	4405	4603	4663	4603	4591	4570	4227	4553	8%	-1%
LOUDON	3929	4087	4173	4533	4612	4739	4881	4862	4886	17%	6%
MACON	3106	3128	3228	3247	3364	3511	3609	3618	3705	8%	10%
MADISON COUNTY	15171	15345	15079	15112	14973	14087	15266	14587	14510	-1%	-3%
MANCHESTER	1170	1307	1302	1288	1323	1306	1344	1115	1205	13%	-9%
MARION	4920	4996	4954	4873	4949	4871	4849	4891	4229	1%	-15%
MARSHALL	4227	4367	4493	4801	4807	4733	4905	4996	5038	14%	5%

District	1991	1992	1993	1994	1995	1996	1997	1998	1999	1991-1995	1995-1999
State Total	880246	893272	906975	923673	936400	948217	962645	978438	967556	6%	3%
MARYVILLE	3560	3728	3775	3871	3862	4004	4117	4328	4096	8%	6%
MAURY	11706	11329	11703	11988	12094	12291	11520	13024	11934	3%	-1%
MCKENZIE	1475	1506	1507	1484	1525	1561	1474	1499	1453	3%	-5%
MCMINN	5802	5940	6128	6120	6089	6279	6374	6188	6182	5%	2%
MCNAIRY	4259	4375	4312	4268	4361	4383	4274	4357	4315	2%	-1%
MEIGS	1558	1688	1682	1689	1787	1851	1871	1788	1832	15%	3%
MEMPHIS	110226	110766	111913	113705	114925	114598	120048	126890	117885	4%	3%
MILAN	2182	2155	2135	2127	2271	2303	2280	2253	2202	4%	-3%
MONROE	4966	5014	5020	5107	5194	5262	5366	5358	5311	5%	2%
MONTGOMERY	18315	19927	20670	21658	22807	24786	24090	26132	30159	25%	32%
MOORE	967	967	979	1003	1068	1037	1030	1147	1093	10%	2%
MORGAN	3463	3554	3583	3569	3403	3579	3501	3466	3721	-2%	9%
MURFREESBORO	4576	4779	5202	5245	5455	6062	5178	5361	6494	19%	19%
NEWPORT	809	854	832	828	812	821	816	818	774	0%	-5%
OAK RIDGE	4769	4827	4923	4956	5084	4769	5024	4980	4888	7%	-4%
OBION	4493	4464	4304	4324	4400	4386	4488	4388	4313	-2%	-2%
ONEIDA	1188	1169	1190	1205	1284	1258	1244	1204	1221	8%	-5%
OVERTON	3187	3163	3152	3111	3113	3166	3156	3206	3159	-2%	1%
PARIS	1316	1316	1385	1399	1386	1633	1745	1658	1609	5%	16%
PERRY	1152	1212	1218	1193	1259	1255	1320	1287	1285	9%	2%
PICKETT	802	829	873	870	875	828	820	825	775	9%	-11%
POLK	2607	2439	2410	2362	2394	2335	2406	2473	2561	-8%	7%
PUTNAM	8870	9193	9126	9762	10131	9818	10692	10410	10168	14%	0%
RHEA	4020	4123	4132	4163	4272	4421	4397	4188	4419	6%	3%
RICHARD CITY	262	289	295	336	381	390	349	338	310	45%	-19%
ROANE	6191	6338	6391	6573	6650	6265	6570	6342	6095	7%	-8%
ROBERTSON	8594	8983	9035	9247	10050	10890	10213	10478	10451	17%	4%
ROGERSVILLE	511	575	637	665	672	663	655	655	648	32%	-4%
RUTHERFORD	19581	20258	21459	21835	22769	23837	25019	25302	25936	16%	14%
SCOTT	3146	3168	3375	3360	3261	3119	3123	3051	2990	4%	-8%
SEQUATCHIE	1750	1699	1704	1684	1737	1833	1903	1881	1881	-1%	8%
SEVIER	9534	9723	10375	10487	10982	12127	12658	12355	12649	15%	15%
SHELBY	43696	45423	45502	46386	47092	49433	50402	51438	52279	8%	11%
SMITH	2836	2907	3035	3059	3179	3214	3283	3201	3248	12%	2%
SOUTH CARROLL	405	422	422	433	399	378	402	430	437	-1%	10%
STEWART	1659	1741	1745	1817	1923	1957	2056	2105	2222	16%	16%
SULLIVAN	14704	14974	14625	14550	14309	14412	14533	15151	14110	-3%	-1%
SUMNER	20364	20568	21058	21122	21895	22888	23130	25192	21832	8%	0%
SWEETWATER	1213	1220	1206	1248	1274	1286	1343	1344	1379	5%	8%
TIPTON	7595	8357	8484	9046	9538	9767	9727	9821	10119	26%	6%
TRENTON	1307	1323	1332	1378	1497	1539	1547	1551	1551	15%	4%

District	1991	1992	1993	1994	1995	1996	1997	1998	1999	1991-1995	1995-1999
State Total	880246	893272	906975	923673	936400	948217	962645	978438	967556	6%	3%
TROUSDALE	1198	1177	1201	1206	1238	1266	1294	1326	1287	3%	4%
TULLAHOMA	3469	3582	3656	3538	3622	3683	3661	3663	3654	4%	1%
UNICOI	2827	2797	2833	2857	2825	2966	2905	2833	2620	0%	-7%
UNION	2454	2507	2617	2775	2949	2965	3104	3165	3045	20%	3%
UNION CITY	1894	1862	1742	1652	1637	1552	1581	1537	1526	-14%	-7%
VAN BUREN	807	807	864	864	863	858	824	833	870	7%	1%
WARREN	6378	6421	6621	6741	6855	6694	6608	6687	6655	7%	-3%
WASHINGTON	8461	8516	8608	8534	8658	8837	8810	9049	9102	2%	5%
WAYNE	2797	2986	2914	3004	2948	2937	2853	2884	2866	5%	-3%
WEAKLEY	5371	5266	5210	5398	5606	5627	5657	5449	5461	4%	-3%
WEST CARROLL	1168	1207	1167	1189	1230	1219	1269	1263	1215	5%	-1%
WHITE	3485	3606	3674	3790	3944	3948	4098	3992	4121	13%	4%
WILLIAMSON	11925	12554	12653	14968	14817	17003	18008	18435	19295	24%	30%
WILSON	10880	11171	11902	11759	11957	12341	12844	12362	12384	10%	4%
State Total	880246	893272	906975	923673	936400	948217	962645	978438	967556	6%	3%

Appendix 9: Change in Total Educator Workforce

District	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	1991-1995	1995-1999
State	52084	52157	53783	53902	54903	56424	56750	58130	58523	60364	62310	6%	10%
ALAMO CITY	29	30	32	33	36	39	38	38	41	39	44	19%	16%
ALCOA CITY	103	111	103	107	110	118	114	113	102	99	105	11%	-8%
ANDERSON	475	473	475	483	496	505	499	501	522	557	550	5%	10%
ATHENS CITY	124	124	120	122	126	122	124	124	124	118	125	3%	1%
BEDFORD	335	344	341	347	359	368	381	379	403	384	395	12%	4%
BELLS CITY	19	19	20	23	22	22	23	24	26	25	27	15%	17%
BENTON	166	160	173	170	171	177	181	188	185	186	187	5%	3%
BLEDSON	93	103	95	92	109	115	115	115	112	121	127	21%	10%
BLOUNT	555	551	570	568	561	572	579	600	614	658	685	2%	18%
BRADFORD SPECIAL	42	42	40	41	39	38	40	41	42	43	40	0%	0%
BRADLEY	539	544	557	548	541	548	553	553	550	596	598	-1%	8%
BRISTOL CITY	266	271	282	287	283	283	282	287	278	275	269	0%	-5%
CAMPBELL	427	424	425	434	440	436	441	457	467	455	473	4%	7%
CANNON	115	122	124	126	128	134	131	134	142	133	156	6%	19%
CARROLL	18	18	16	18	18	18	19	19	20	19	21	19%	11%
CARTER	428	417	420	421	428	433	446	457	466	468	507	6%	14%
CHEATHAM	302	306	303	311	335	348	370	398	391	408	429	22%	16%
CHESTER	123	123	126	131	136	139	147	148	156	159	169	17%	15%
CLAIBORNE	333	322	332	330	347	355	351	360	359	378	400	6%	14%
CLAY	109	113	113	115	115	120	119	116	106	101	98	5%	-18%
CLEVELAND CITY	291	294	294	299	300	315	316	324	317	340	340	7%	8%
CLINTON CITY	76	79	82	83	80	84	86	89	81	87	84	5%	-2%
COCKE	261	275	278	279	296	301	314	321	316	315	317	13%	1%
COFFEE	237	230	237	243	250	255	269	275	273	283	298	14%	11%
COVINGTON CITY	63	67	64	58	68	70	69	72	71	68	61	8%	-12%
CROCKETT COUNTY	111	108	106	110	109	116	117	119	121	107	109	10%	-7%
CUMBERLAND	341	342	353	352	356	374	388	398	396	400	415	10%	7%
DAYTON CITY ELEM	37	35	35	35	40	39	41	41	41	40	41	17%	0%
DECATUR	124	121	120	117	128	136	132	137	143	143	147	10%	11%
DEKALB	153	151	153	156	157	166	167	170	172	186	184	9%	10%
DICKSON	381	390	413	399	425	442	464	475	510	536	508	12%	9%
DYER	209	207	207	205	209	207	212	215	213	210	219	2%	3%
DYERSBURG CITY	209	204	223	224	222	222	215	221	228	212	222	-4%	3%
ELIZABETHTON CITY	161	164	167	164	170	169	163	167	162	172	169	-2%	4%
ETOWAH CITY	29	29	25	25	26	28	29	27	27	25	31	16%	7%
FAYETTE	285	284	292	286	303	297	295	282	270	266	254	1%	-14%
FAYETTEVILLE CITY	63	61	62	62	66	69	71	74	66	79	71	15%	0%
FENTRESS	155	175	176	174	179	182	180	182	182	182	181	2%	1%
FRANKLIN	368	382	372	383	379	393	400	413	437	404	415	8%	4%
FRANKLIN CITY	225	231	248	258	269	275	275	273	296	302	325	11%	18%
GIBSON SPEC DISTRICT	121	126	124	132	131	134	135	139	150	156	142	9%	5%
GILES	274	271	284	292	305	316	321	324	310	320	326	13%	2%
GRAINGER	175	193	198	192	204	206	210	217	217	220	216	6%	3%
GREENE	422	420	413	419	417	434	423	445	429	481	491	2%	16%
GREENEVILLE CITY	220	213	228	223	223	228	224	217	213	207	208	-2%	-7%

District	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	1991-1995	1995-1999
State	52084	52157	53783	53902	54903	56424	56750	58130	58523	60364	62310	6%	10%
GRUNDY	192	197	195	188	191	196	194	200	195	203	196	-1%	1%
HAMBLEEN COUNTY	591	594	613	617	637	632	618	639	636	647	681	1%	10%
HAMILTON	3047	2957	3028	2887	2897	2945	2831	2763	2732	2717	2789	-7%	-1.5%
HANCOCK	93	97	105	108	111	113	116	119	113	109	105	10%	-9%
HARDEMAN	295	309	329	337	330	337	334	333	333	337	347	2%	4%
HARDIN	265	262	266	264	267	273	280	293	293	295	289	5%	3%
HARRIMAN CITY	138	133	130	126	123	126	126	126	118	121	117	-3%	-7%
HAWKINS	438	439	452	438	450	471	483	491	496	510	517	7%	7%
HAYWOOD	259	262	289	283	279	288	293	295	295	306	314	1%	7%
HENDERSON	198	197	198	200	208	207	220	234	240	249	235	11%	7%
HENRY	214	215	225	224	226	228	231	230	224	217	219	3%	-5%
HICKMAN	169	171	183	191	192	217	221	224	235	222	226	21%	2%
HOLLOW ROCK-BRUCETON	51	49	50	53	54	55	54	52	54	56	56	8%	4%
HOUSTON	78	83	84	81	82	82	87	91	86	90	94	4%	8%
HUMBOLDT CITY	155	159	158	156	155	162	163	164	164	158	157	3%	-4%
HUMPHREYS	181	181	190	182	188	191	197	204	209	221	223	4%	13%
HUNTINGDON SPECIAL	87	89	91	93	94	94	90	93	94	98	96	-1%	7%
JACKSON	96	102	112	110	107	112	113	122	116	120	125	1%	11%
JEFFERSON	345	339	345	337	348	346	351	376	386	416	436	2%	24.2%
JOHNSON	180	190	187	176	182	191	182	179	183	176	179	-3%	-2%
JOHNSON CITY	400	417	411	423	402	427	419	436	412	485	475	2%	13%
KINGSPORT CITY	393	393	442	442	454	453	458	455	431	438	439	4%	-4%
KNOX	3531	3599	3653	3554	3577	3602	3590	3660	3730	3649	4161	-2%	16%
LAKE	77	79	84	86	86	92	87	84	79	83	76	4%	-13%
LAUDERDALE	299	308	309	298	311	323	324	327	318	360	353	5%	9%
LAWRENCE	376	381	398	401	411	422	442	448	456	467	476	11%	8%
LEBANON CITY	147	150	159	162	174	188	178	179	189	211	203	12%	14%
LENOIR CITY	97	103	101	105	106	114	112	118	122	144	135	11%	20.5%
LEWIS	107	106	108	114	116	119	122	123	127	129	132	13%	8%
LEXINGTON CITY	44	47	48	51	51	51	52	56	59	62	61	8%	17%
LINCOLN	262	263	270	278	276	285	288	293	296	313	316	7%	10%
LOUDON	248	256	259	272	264	275	282	285	289	274	296	9%	5%
MACON	160	161	165	174	184	197	212	217	231	243	241	28%	14%
MADISON	449	445	894	900	965	976	939	1001	987	995	1064	5%	13%
MANCHESTER CITY	82	80	79	79	84	87	88	91	91	90	94	11%	7%
MARION	308	299	296	291	305	322	320	293	285	285	322	8%	1%
MARION	13	15	16	18	19	24	24	23	22	19	23	50%	-4%
MARSHALL	242	240	258	259	269	279	286	294	312	328	350	11%	22.4%
MARYVILLE CITY	219	220	235	242	241	246	252	268	276	324	300	7%	19%
MAURY	633	639	679	694	706	727	720	770	766	775	839	6%	17%
MCKENZIE SPECIAL	86	87	85	86	86	91	92	96	94	91	91	8%	-1%
MCMINN	351	352	347	345	349	355	363	359	366	367	366	5%	1%

District	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	1991-1995	1995-1999
State	52084	52157	53783	53902	54903	56424	56750	58130	58523	60364	62310	6%	10%
MCNAIRY	252	253	260	256	263	280	282	285	297	304	279	8%	-1%
MEIGS	98	92	94	99	104	110	114	114	109	114	113	21%	-1%
MEMPHIS CITY	6500	6359	6573	6665	6626	6692	6582	6768	6495	6901	7147	0%	9%
MILAN CITY SPECIAL	123	126	134	133	146	150	153	154	149	160	167	14%	9%
MONROE	281	273	269	271	288	292	296	303	317	308	311	10%	5%
MONTGOMERY	960	962	1023	1018	1106	1189	1240	1313	1419	1482	1567	21%	26.4%
MOORE	65	61	63	61	63	63	65	65	67	69	63	3%	-3%
MORGAN	184	206	213	222	220	227	232	238	241	243	239	9%	3%
MURFREESBORO CITY	265	272	302	313	319	331	362	363	366	376	417	20%	15%
DAVIDSONSCH DI	4582	4479	4318	4457	4565	4732	4711	4652	4751	4994	5153	9%	9%
NEWPORT CITY ELEM	45	49	50	48	49	50	51	52	52	54	54	2%	6%
OAK RIDGE CITY	355	355	366	372	367	379	392	396	377	387	370	7%	-6%
OBION	274	270	270	276	265	273	278	284	287	297	302	3%	9%
ONEIDA CITY	76	75	81	80	85	82	84	87	83	87	84	4%	0%
OVERTON	189	196	205	200	203	207	211	219	226	225	225	3%	7%
PARIS CITY SPECIAL	91	91	90	79	80	85	87	96	100	97	97	-3%	11%
PERRY	83	78	87	83	80	83	88	95	97	100	98	1%	11%
PICKETT	57	57	61	61	64	69	68	71	68	71	70	11%	3%
POLK	160	149	156	148	154	154	156	156	161	168	169	0%	8%
PUTNAM	504	512	525	542	541	551	553	590	633	651	652	5%	18%
RHEA	258	251	251	233	228	240	238	241	253	265	267	-5%	12%
ROANE	373	386	386	369	390	409	417	414	428	439	437	8%	5%
ROBERTSON	465	480	495	492	515	549	569	606	619	633	685	15%	20%
ROGERSVILLE CITY	36	35	34	39	39	41	42	44	45	42	51	24%	21.4%
RUTHERFORD	1040	1073	1108	1137	1167	1228	1255	1328	1466	1620	1714	13%	36.6%
SCOTT	182	190	198	197	201	209	212	218	225	232	232	7%	9%
SEQUATCHIE	127	123	128	123	115	116	117	115	118	128	133	-9%	14%
SEVIER	537	563	580	597	610	643	668	702	723	767	808	15%	21.0%
SHELBY	1924	1970	2139	2251	2248	2378	2417	2605	2615	2733	2652	13%	10%
SMITH	159	157	162	164	170	177	181	180	186	190	186	12%	3%
SOUTH CARROLL SPECIAL	24	24	26	25	26	26	27	28	30	26	26	4%	-4%
STEWART	105	102	99	101	100	106	110	111	119	110	128	11%	16%
SULLIVAN	1089	1076	1043	1008	990	986	977	975	954	949	961	-6%	-2%
SUMNER	1143	1143	1181	1186	1246	1300	1308	1425	1448	1444	1513	11%	16%
SWEETWATER CITY	69	64	68	64	69	74	76	80	83	86	83	12%	9%
TIPTON	358	376	397	399	427	469	496	521	528	585	563	25%	14%
TRENTON CITY	88	92	98	88	93	97	96	97	99	97	95	-2%	-1%
TROUSDALE	73	71	77	74	75	77	76	79	85	90	93	-1%	22.4%
TULLAHOMA CITY	218	224	228	223	239	242	242	250	246	245	247	6%	2%
UNICOI	180	174	179	170	176	183	179	181	179	197	181	0%	1%
UNION	131	135	142	147	161	162	168	177	175	200	223	18%	32.7%
UNION CITY	143	140	139	138	132	123	121	120	114	119	120	-13%	-1%
VAN BUREN	51	53	52	51	57	59	63	63	66	64	69	21%	10%

District	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	1991-1995	1995-1999
State	52084	52157	53783	53902	54903	56424	56750	58130	58523	60364	62310	6%	10%
W CARROLL SPEC DISTRICT	68	70	69	70	71	72	76	78	79	82	83	10%	9%
WARREN	384	386	405	400	424	409	423	435	447	461	464	4%	10%
WASHINGTON	553	546	536	517	528	531	538	548	543	553	596	0%	11%
WA YNE	190	184	182	184	195	192	193	194	206	214	221	6%	15%
WEAKLEY	334	338	344	326	327	331	345	346	350	358	365	0%	6%
WHITE	221	216	222	220	227	238	235	238	236	232	246	6%	5%
WILLIAMSON	664	686	756	775	812	881	953	1016	1017	1073	1140	26%	20%
WILSON	565	580	572	548	588	608	624	641	659	679	758	9%	21.5%

Appendix 10: Relating Change in Total Educator Workforce to Change in Enrollments

District	Enrollment 1999	Enrollment Growth 1995-1999	Workforce 1999	Workforce Growth 1995-1999	Ratio E/W
State Total		3%		10%	0.96
ALAMO	597	5%	44	16%	0.91
ALCOA	1373	-13%	105	-8%	0.95
ANDERSON	7341	-3%	550	10%	0.88
ATHENS	1999	-4%	125	1%	0.96
BEDFORD	6360	3%	395	4%	1.00
BELLS	363	-4%	27	17%	0.81
BENTON	2763	-4%	187	3%	0.93
BLED SOE	1958	9%	127	10%	0.99
BLOUNT	11354	0%	685	18%	0.85
BRADFORD	666	-2%	40	0%	0.98
BRADLEY	9453	-3%	598	8%	0.90
BRISTOL	3905	-6%	269	-5%	0.99
CAMPBELL	6974	2%	473	7%	0.95
CANNON	2170	2%	156	19%	0.86
CARTER	6581	0%	507	14%	0.88
CHEATHAM	7247	10%	429	16%	0.95
CHESTER	2621	5%	169	15%	0.91
CLAIBORNE	5199	-1%	400	14%	0.87
CLAY	1252	-7%	98	-18%	1.13
CLEVELAND	4953	-5%	340	8%	0.88
CLINTON	946	-19%	84	-2%	0.83
COCKE	4919	0%	317	1%	0.99
COFFEE	4339	2%	298	11%	0.92
COVINGTON	973	-14%	61	-12%	0.97
CROCKETT	1866	3%	109	-7%	1.11
CUMBERLAND	7519	10%	415	7%	1.03
DAVIDSON	80750	7%	5153	9%	0.98
DAYTON	727	-4%	41	0%	0.96
DECATUR	1913	0%	147	11%	0.90
DEKALB	2742	-4%	184	10%	0.87
DICKSON	8352	5%	508	9%	0.96
DYER	3711	4%	219	3%	1.00
DYERSBURG	3460	-3%	222	3%	0.94
ELIZABETHTON	2206	-15%	169	4%	0.82
ETOWAH	416	38%	31	7%	1.29
FAYETTE	4265	-17%	254	-14%	0.96
FAYETTEVILLE	1166	-1%	71	0%	0.99
FENTRESS	2432	-5%	181	1%	0.94
FRANKLIN	6369	-4%	415	4%	0.92
FRANKLIN	4250	16%	325	18%	0.98
GIBSON . SPEC.	2519	5%	142	5%	1.00
GILES	5083	-2%	326	2%	0.96

District	Enrollment 1999	Enrollment Growth 1995-1999	Workforce 1999	Workforce Growth 1995-1999	Ratio E/W
State Total		3%		10%	0.96
GRAINGER	3292	-4%	216	3%	0.93
GREENE	7259	5%	491	16%	0.90
GREENEVILLE	2516	-7%	208	-7%	1.00
GRUNDY	2439	-9%	196	1%	0.90
HAMBLEN	9742	6%	681	10%	0.97
HAMILTON	47231	-3%	2789	-1%	0.99
HANCOCK	1172	-13%	105	-9%	0.96
HARDEMAN	5005	-5%	347	4%	0.91
HARDIN	4268	0%	289	3%	0.97
HARRIMAN	1591	-17%	117	-7%	0.89
HAWKINS	7313	2%	517	7%	0.96
HAYWOOD	3958	-8%	314	7%	0.86
HENDERSON	3496	-6%	235	7%	0.88
HENRY	3639	-8%	219	-5%	0.98
HICKMAN	3738	11%	226	2%	1.08
HOLLOW ROCK-BR	899	5%	56	4%	1.01
HOUSTON	1453	2%	94	8%	0.94
HUMBOLDT	2172	-10%	157	-4%	0.93
HUMPHREYS	3224	-1%	223	13%	0.88
HUNTINGDON	1490	-2%	96	7%	0.92
JACKSON COUNTY	1721	10%	125	11%	0.99
JEFFERSON	6792	11%	436	24%	0.89
JOHNSON	2539	-3%	179	-2%	0.99
JOHNSON CITY	7230	9%	475	13%	0.96
KINGSPORT	6853	9%	439	-4%	1.13
KNOX	56590	-1%	4161	16%	0.86
LAKE	1053	-14%	76	-13%	0.99
LAUDERDALE	5135	-10%	353	9%	0.83
LAWRENCE	7354	3%	476	8%	0.95
LEBANON	3178	22%	203	14%	1.07
LENOIR CITY	2026	11%	135	21%	0.92
LEWIS	2015	-2%	132	8%	0.91
LEXINGTON	898	-4%	61	17%	0.82
LINCOLN	4553	-1%	316	10%	0.90
LOUDON	4886	6%	296	5%	1.01
MACON	3705	10%	241	14%	0.97
MADISON COUNTY	14510	-3%	1064	13%	0.86
MANCHESTER	1205	-9%	94	7%	0.85
MARION	4229	-15%	345	0%	0.85
MARSHALL	5038	5%	350	22%	0.86
MARYVILLE	4096	6%	300	19%	0.89
MAURY	11934	-1%	839	17%	0.85
MCKENZIE	1453	-5%	91	-1%	0.96

District	Enrollment 1999	Enrollment Growth 1995-1999	Workforce 1999	Workforce Growth 1995-1999	Ratio E/W
State Total		3%		10%	0.96
MCMINN	6182	2%	366	1%	1.01
MCNAIRY	4315	-1%	279	-1%	1.00
MEIGS	1832	3%	113	-1%	1.03
MEMPHIS	117885	3%	7147	9%	0.94
MILAN	2202	-3%	167	9%	0.89
MONROE	5311	2%	311	5%	0.97
MONTGOMERY	30159	32%	1567	26%	1.05
MOORE	1093	2%	63	-3%	1.06
MORGAN	3721	9%	239	3%	1.06
MURFREESBORO	6494	19%	417	15%	1.03
NEWPORT	774	-5%	54	6%	0.90
OAK RIDGE	4888	-4%	370	-6%	1.02
OBION	4313	-2%	302	9%	0.90
ONEIDA	1221	-5%	84	0%	0.95
OVERTON	3159	1%	225	7%	0.95
PARIS	1609	16%	97	11%	1.04
PERRY	1285	2%	98	11%	0.92
PICKETT	775	-11%	70	3%	0.86
POLK	2561	7%	169	8%	0.99
PUTNAM	10168	0%	652	18%	0.85
RHEA	4419	3%	267	12%	0.92
ROANE	6095	-8%	437	5%	0.87
ROBERTSON	10451	4%	685	20%	0.86
ROGERSVILLE	648	-4%	51	21%	0.79
RUTHERFORD	25936	14%	1714	37%	0.83
SCOTT	2990	-8%	232	9%	0.84
SEQUATCHIE	1881	8%	133	14%	0.95
SEVIER	12649	15%	808	21%	0.95
SHELBY	52279	11%	2652	10%	1.01
SMITH	3248	2%	186	3%	0.99
SOUTH CARROLL	437	10%	26	-4%	1.14
STEWART	2222	16%	128	16%	0.99
SULLIVAN	14110	-1%	961	-2%	1.00
SUMNER	21832	0%	1513	16%	0.86
SWEETWATER	1379	8%	83	9%	0.99
TIPTON	10119	6%	563	14%	0.93
TRENTON	1551	4%	95	-1%	1.05
TROUSDALE	1287	4%	93	22%	0.85
TULLAHOMA	3654	1%	247	2%	0.99
UNICOI	2620	-7%	181	1%	0.92
UNION	3045	3%	223	33%	0.78
UNION CITY	1526	-7%	120	-1%	0.94
VAN BUREN	870	1%	69	10%	0.92

District	Enrollment 1999	Enrollment Growth 1995-1999	Workforce 1999	Workforce Growth 1995-1999	Ratio E/W
State Total		3%		10%	0.96
State Total		3%		10%	0.96
WARREN	6655	-3%	83	9%	0.89
WASHINGTON	9102	5%	464	10%	0.96
WAYNE	2866	-3%	596	11%	0.88
WEAKLEY	5461	-3%	221	15%	0.85
WEST CARROLL	1215	-1%	365	6%	0.93
WHITE	4121	4%	246	5%	1.00
WILLIAMSON	19295	30%	1140	20%	1.09
WILSON	12384	4%	758	21%	0.85